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DATES TO REMEMBER

Oct. 3	**Virginia State Federation, CEC, Newcomb Hall, U. of Virginia, Charlottesville**
Oct. 4-10	National Employ the Physically Handicapped Week
Oct. 18-23	American Occupational Therapy Association, Hotel Morrison, Chicago
Oct. 19-23	American Public Health Association, Atlantic City, N. J.
Oct. 21-24	National Association for Retarded Children, Cincinnati
Oct. 24	**Delaware Federation, CEC, Auditorium, Harlan Junior High School, Wilmington**
Oct. 26-28	National Rehabilitation Assn., Statler-Hilton, Boston
Oct. 29	**West Virginia Federation, CEC, Huntington**
Oct. 29-30	**New York State Federation, CEC, Hotel Manger-Vanderbilt, New York City**
Oct. 30-31	**Illinois Association for the Education of Exceptional Children, CEC, Decatur**
Nov. 6	**Missouri Federation, CEC, St. Louis**
Nov. 6-7	**Ohio Federation, CEC, Springfield**
Nov. 8-14	American Education Week
Nov. 15-18	**CEC Regional Conference, Sheraton-Biltmore Hotel, Providence, Rhode Island**
Nov. 27	**Texas Council for Exceptional Children, CEC, San Antonio**
Dec. 28-30	Speech Association of America, Washington, D. C.

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CEC Conventions: Sept. '59, p. 32-33.
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From the Beginning

HARLEY Z. WOODEN, CEC EXECUTIVE SECRETARY

During the summer of 1922, the Council for Exceptional Children became an idea in the minds of special-education summer-session students and faculty at Teachers College, Columbia University. On the evening of August 10, during a dinner meeting held at a 35th Street and Park Avenue residence, the idea was formalized and the resulting organization was named, The International Council for the Education of Exceptional Children. In 1933, "the Education of" was dropped from the title for the purpose of indicating greater breadth of Council interest in exceptional children. And in 1958, "International" was dropped as being non-essential and sometimes a handicap in dealing with national issues.

During its early years, Council problems were numerous. To strengthen its organizational structure, it established, in 1926, seven regions with a chairman for each. However, such chairmen were far removed from the average Council member, thereby giving little opportunity either for exploring or stimulating local interests. Furthermore, the limited membership potential, the deficiency in operating funds, and the lack of a strong official publication made for slow progress. Even the Council's conventions presented a problem. Registration was confined largely to local faculty and friends from the host city, supplemented by a few special education administrators and supervisors from other Canadian and American communities. To enhance attendance, the Council scheduled each convention to precede, in the same or nearby city, the annual convention of the NEA Department of Superintendence. And so the Council improvised and struggled along, capitalizing as best it could on its limited opportunities. However, in 1933, catastrophe almost overtook it. After having operated for three depression years in competition with the NEA's newly created Department of Special Education, the bank crash arrived and wiped out all its meager assets.

The resulting gloom that prevailed at the 1933 convention in Minneapolis is easy to understand. To carry on in hard times with no money, while faced with a rival organization, seemed like an insurmountable problem—so the board debated the possibility of dissolving ICEEC as a lost cause. However, one factor that helped clinch the decision to remain in business was the reluctance to return a chapter's membership dues received during the convention. That expression of chapter faith gave the board the necessary courage to attack its problems and plan for better days ahead.

The Council's first attempt at a publication had been known as *The Council News Letter*, initiated in 1923 and issued as news was acquired and funds permitted. This eventually became less regular and died with the loss of the Council's funds. In 1934, the Council appropriated its total cash balance, of $150, to start a publication known as the *Council Review*. After one year, the organization abandoned the project and contracted for its publication under private ownership and a new name—*The Journal of Exceptional Children*. Later, pride of owning its own magazine prompted the Council to acquire the Journal as its official organ.

In the meantime, many things had been happening. Council members had begun to invest more money, time, and effort in their organization. Section meetings at the annual convention had been developed on a broader scale to include the various areas of exceptionality. The magazine had been increased from three to five and then to eight issues per year. A treasurer-manager had been employed, with a business office established in her home, and the Special Education Department of the NEA had proposed a merger with ICEC, which, in 1941, resulted in the Council becoming a department of the National Education Association.

However, the Council was still in its beginnings. It had no operating units other than its local chapters, no professional staff, and very limited committee work. But it did not stand still. To give greater membership participation in its activities, it established, in 1946, a delegate assembly. Simultaneously, it reorganized and increased its regions to nine, with each region having one representative on the Council's board of directors. The delegate assembly, as a governing device, immediately increased membership activity in Council operation, but representation on the board was still too remote to be effective. Not until 1954, when each state and province that qualified became an intermediate unit of organization, did the Council truly begin to serve its professional needs at the three levels—local, state-provincial, and international. In addition, the creation of such state-provincial units, each with authority to elect its own representative to the Council's governing board, added a new dimension to democracy in CEC.

In 1950, through the moral and financial assistance of the National Education Association, the Council established an office at NEA headquarters in Washington, D. C. Since that date, membership has increased by more than 125 percent and subscriptions by nearly 300 percent. The Journal has been enlarged and improved in content, international convention programs have been further improved in scope and variety, and assistance in chapter and federation program development has been initiated. In addition, affiliation of most state chapters and of all federations has occurred since that date, cooperation with leading special education and social agencies interested in exceptional children has been established through the Council-sponsored interagency relations committee, activity in federal legislative matters has been developed, and modest beginnings have been made both in special publications and in consultative services. But the demands to improve and expand services persist—particularly in those areas not yet adequately covered.

At the Atlantic City convention, the delegate assembly and governing board decided to proceed with the job. As a result, plans for a publishing program of popular materials and research monographs have been undertaken; the Journal has, again, been increased in scope; the program of the committee on Canadian affairs has received its first financial assistance; a second annual regional conference has been authorized; and a multitude of other items have been identified for study, selection, and priority assignment.

Thus the Council's foresight, patience, and perseverance during its first dozen years have been rewarded by the steady progress made since that time.

The effects of

AN ELEMENTARY SCHOOL FAST-LEARNER PROGRAM

on children's social relationships

MARY GOLDWORTH

This report is based upon a 1957 doctoral dissertation, "The Effects of a Fast-Learner Program on the Social Relationships of Elementary School Children," School of Education, Stanford University, taken under the direction of Arthur P. Coladarci. A companion study investigating school achievement and interest in science, was conducted there concurrently by Richard H. Hinze: "Achievement Factors Among Fast-Learners in a Partially Segregated Elementary School Program, with Special Reference to Science Instruction."

THE RECENT mounting concern about the education of gifted children appears to be an appropriate one. Available studies suggest that intellectual potentialities of the gifted have been fulfilled inadequately (7; 16, p. 23; 18). There are further indications that attention must be directed to socio-emotional factors in the school situation, in view of the relationships of such factors to achievement in school and in later life (5; 16, p. 132-62, 35-37). A growing number of schools are attempting to implement more adequate programs (6), although educational efforts which take account of such findings have been considered seriously lacking (4, p. iii; 15).

Three basic schemes most commonly considered and upon which a variety of educational practices have been based are: acceleration, which involves faster-than-usual "promotion;" "enrichment" of pupil experience in the regular age-grade placement; and special grouping, involving the identification of gifted children and placing them together for instructional purposes. There has been much discussion of and disagreement about the desirability and effectiveness of these various approaches (13, 14, 17), and an examination of the arguments and evidence suggests that more information is needed to clarify the issues. One of the fears frequently voiced is that special grouping practices may promote attitudes of intolerance and may undesirably affect children's acceptance of each other (9, p. 403-404; 13, 39-41; 16, p. 205). In this study an attempt was made to determine whether or not such negative attitudes may in fact be present by examining the effects on children's social relationships of a program for fast-learning children which involved part-time special grouping.

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Experimental Setting

The school district in which this study was conducted is located in a suburban community in the San Francisco Bay area. It provided a program whereby fast-learning children attended special classes held for 90-minute periods twice a week. Pupils admitted to this special program were those in the fourth through eighth grades whose IQ's were 130 or higher on the California Test of Mental Maturity or 120 or higher on the short form of the Revised Stanford-Binet. Four subject areas were offered for study: art, biological science, physical science, and social studies. Each child was assigned, as nearly as possible, to a class of his chosen interest, as determined by his responses to a questionnaire. In each area two groups were formed: pupils from grade levels four through six, and those from grades seven and eight. The number of children in each group was limited to fifteen. Since the building in which the special classes were held was located some distance away from the other schools in the district, all children were transported to and from these classes by school bus. The early part of the 1955-56 school year was devoted to program planning and identification of fast-learners. The special classes were conducted during the five-month period beginning January 1956. The schools in this district do not practice mid-year promotions.

Four special teachers were employed on a half-time basis, one for each subject area. All of them

were doctoral candidates in the School of Education at Stanford University, held a California Teaching Credential, and each was a specialist in one of the subject areas involved. Attempts were made to have the special and regular teachers work closely together in order that all might have a common understanding of the goals and activities of both the regular and the fast-learner program. Such coordination was achieved to only a limited extent during the experimental period because of circumstances within the school district.

In order to select an experimental and a control group for this study, the following procedures were used. Among grade levels four through eight in the eight schools throughout the district, 63 classrooms[1] were found to contain fast-learners. These classrooms were randomly divided by school and by grade level, into two groups, one of which was designated as experimental and the other as control. These two groups were comparable in size, IQ distribution, and number of fast-learners. They were also found to be comparable on the classroom index of "degree of acceptance," as indicated by an analysis of a set of data obtained from pre-measures at the beginning of the experimental period. The social distance scale and "degree of acceptance" will be discussed later. The fast-learners who were in the experimental group (N-204) participated in the special program; the ones in the control group did not (N-211). The following classification of groups was used:

1. EXPERIMENTAL FAST-LEARNERS, who attended special classes
2. CONTROL FAST-LEARNERS, who did not attend special classes
3. NON-FAST-LEARNER EXPERIMENTALS, who were not designated as fast-learners but attended classrooms in which fast-learners were participating in the special program
4. NON-FAST-LEARNER CONTROLS, who were not designated as fast-learners and who attended classrooms in which fast-learners did not participate in the special program
5. EXPERIMENTAL CLASSROOMS, regular classrooms in which there were experimental fast-learners
6. CONTROL CLASSROOMS, regular classrooms in which there were control fast-learners.

Pre-measures and post-measures were administered[2] to all children in experimental and control classrooms, using the Columbia Classroom Social Distance Scale (3, p. 401-402) and three sociometric tests. The former measure requires each pupil to rate each of his classmates on a five-point scale:

1. "I would like to have him as one of my best friends."
2. "I would like to have him in my group but not as a close friend."
3. "I would like to be with him once in a while but not for a long time."
4. "I don't mind his being in our room but I want nothing to do with him."
5. "I wish he were not in our room."

The sociometric test asked each pupil to indicate which three classmates he would most prefer to "work-with," "play-with," and "sit-with" (1, 2, 8, 10, 11, 12).

The experimental and control groups were compared, by grade levels, in terms of each of the following five variables:

1. change in children's acceptance of each other as friends
2. change in children's acceptance of fast-learners as friends
3. change in fast-learner's acceptance of classmates as friends
4. change in the degree of cohesion within regular classroom groups
5. change in the degree of fast-learner subgroup preferences within regular classroom groups.

The significance of differences between experimental and control groups with respect to these variables were tested by use of chi-square.

Experimental Questions and Findings

1. Is there a difference between children in the experimental classrooms and children in the control classrooms with respect to change in their acceptance of each other as friends?

[1] In these classrooms there was a total of 1,685 children, out of which 415 were identified as fast-learners.

[2] Pre-measures were administered during the third week in January, 1956, and post-measures were administered during the last week in May. Thus, the attitudes studied reflect a period of four-and-a-half months.

"Degree of acceptance" for each pupil was obtained from a raw score consisting of the number of ratings he received in the "best-friend" category of the social distance scale. However, this raw acceptance score could not be used directly for a pre- and post-comparison since the number of children in a classroom (and hence, the total number of ratings received by each child on all five points of the scale) often changed for the pre-period to the post-period. In order to eliminate this difficulty, each raw acceptance score was divided by the total number of ratings a child received from his classmates, thereby transforming it into percent. Change in degree of acceptance was then determined by comparing pre- and post-percents for every child. The proportions of children showing increases, decreases, and no change, were determined and the differences between those for experimental classrooms and those for control classrooms were tested for significance. At all grade levels, 4-6 and 7-8, it was found that the proportion of children showing an increase in the degree to which they were accepted as friends by their classmates was significantly greater ($P<.001$) in control groups than in experimental groups. These results may be explained by the fact that fast-learners were away from their classrooms for two periods a week. The way in which the program was implemented during this first year of experimentation suggests other possible explanations. Because of various practical considerations, regular classroom teachers did not participate in the planning of the program. In addition, there was no opportunity for organized coordination of effort between them and the special teachers, especially since the special classes were held in a school building some distance away from the other schools. These conditions may have limited the effectiveness with which the regular teachers could exploit the fast-learner program so as to maintain the most adequate social atmosphere possible for the pupils in the classrooms. Perhaps they found it difficult to make good use of the times during which fast-learners were out of the room attending special classes. Perhaps, too, lacking intimate knowledge of the progress that their fast-learner pupils were making in the special classes, they found it difficult to integrate special class experiences into the regular classroom activities. Obviously, such problems could affect the teachers' satisfaction with their work and consequently affect the degree to which children could enjoy their associations with one another within the context of their educational experience.

Another explanation of the results might be found in parental attitudes. It was hoped that parents would view the fast-learner program as an integral part of the regular school program and as a means of providing for the individual differences among school children. Unfortunately, no data on parent attitudes are available. However, since parents whose children were in the experimental classrooms were more directly in contact with the fast-learner program than parents whose children were in control classrooms, it seems likely that their opinions on this subject would have been not only more defined but also considerably more diverse. Some may have felt that the fast-learner classes offered better educational opportunities than the regular classes. Others may have felt that the special classes detracted from the effectiveness of the regular classes because they disrupted the school routine, or because they discriminated between children, giving special attention to some and not to others. In either case, children's enthusiasm for the regular classroom may have been dampened, thereby affecting their social relationships with classmates. The reader is reminded that this discussion pertains to a comparison between all children in experimental classrooms and all children in control classrooms.

2. Is there a difference between experimental fast-learners and control fast-learners with respect to change in the degree to which they are accepted as friends by their classmates?

Procedures for this question were identical to those used for the previous question except that, instead of considering all children in experimental classrooms, only fast-learners were compared. In grades 4-6, a greater proportion of controls showed an increase in the degree to which they were accepted as friends by their classmates. The difference was not significant ($.10>P>.05$) but warrants attention since it is in the same direction as that found above. The same reasons are offered in explanation. In grades 7-8, the difference between experimental and control fast-learners was not significant. ($.80>P>.70$). Possible reasons are that these children are older, more mature, and more stable in their

feelings and that they are more accustomed to having their classmates leave the room for a variety of reasons.

3. Is there a difference between experimental fast-learners and control fast-learners with respect to change in the degree to which they accept their classmates as friends?

Procedures were identical to those described above with the exception that, instead of considering ratings made by classmates on each fast-learner, the analysis involved the ratings made by each fast-learner of his classmates. At all grade levels, 4-6 and 7-8, no significant differences were found between experimental and control fast-learners ($.50>P>.30$). Thus, the fast-learner program had no apparent effect on the feelings of fast-learners toward their classmates within the regular classroom setting. This finding seems to contradict the common view that special grouping fosters attitudes of intolerance.

4. Is there a difference between experimental classrooms and control classrooms with respect to the degree of change in "group cohesion?"

Each of the criteria on the sociometric test—"work-with," "play-with," and "sit-with"—was examined separately. A measure of group cohesion was determined for each regular classroom by dividing the actual number of mutual choices by the total possible number of mutual choices. The proportions of classrooms showing an increase, a decrease, or no change were determined and differences between experimental and control classrooms were then tested for significance. With one exception, no significant difference was found at any one of the grade levels or for any of the three sociometric test criteria. Significance levels ranged from $.20>P>.10$ to $.90>.80$. Thus, for the most part, the fast-learner program did not have any apparent effect on the volume of positive interaction (i.e., volume of mutual choices) within classroom groups with respect to any one of the educational settings referred to by the various sociometric criteria. These results seem to be in contradiction with the findings reported for question #1, where children in experimental classrooms showed a decrease in the degree to which they accepted each other as friends. However, the contradiction is more apparent than real. The explanation probably lies in the difference between the two measuring instruments and the ways in which the data were analyzed. The first question was concerned with the number of "best-friend" ratings, whereas the present one is concerned with the number of mutual choices. It is possible for the number of best-friend ratings to change while the number of mutual choices remains the same or even changes in opposite directions. The finding of these two questions indicate that, in the experimental classrooms, there was a decrease in the proportion of classmates who were accepted as best friends but no effect on the proportion of mutual friendships.

5. Is there a difference between experimental and control classrooms with respect to the degree of change in the fast-learner "sub-group preference?"

Data and procedures were the same as those for question #4. Sub-group preference was determined for each regular classroom by dividing the number of choices made by fast-learners of other fast-learner classmates by the total possible number of such choices that could have been made by fast-learners. At all grade levels, and for each of the three criteria, no significant difference was found between experimental and control fast-learners. Significance levels ranged from $.50>P>.30$ to $.99>P>.98$. The fast-learner program did not result in the formation of identifiable sub-groups or cliques among the fast-learners within their regular classroom groups.

Implications

On the whole then, this study suggests that for regular classroom groups, the fast-learner program: (a) had a limiting effect on the number of classmates which children accepted as best friends, and (b) had no effect on fast-learners' acceptance of classmates as best-friends, on group cohesion, or on sub-group preference. It is concluded that, despite the occurrence of some negative changes, these children's social relationships remained relatively stable.

Several precautions are necessary in interpreting these findings. The fact that this study was con-

ducted under conditions which permitted only limited opportunities for coordination of effort between regular classroom teachers and special class teachers seems to constitute an important limitation on the experimental program. Another consideration is that the findings of this study are based upon an assessment of attitudes over a period of somewhat less than five months in duration, and that this period was in the latter part of the school year.

One must bear in mind that the use of sociometric instruments and of large number of subjects provides only limited information about social relationships and does not warrant specific generalization regarding the broad area of socio-emotional growth. Further, sociometric questions emphasize those educational objectives concerned with how well children like each other and get along together. Such objectives are not the only bases upon which the adequacy of an educational program should be judged, particularly if one is concerned with such dimensions as motivation, initiative, and creative thinking.

With regard to the educational program, a distinction must be made between administrative procedure (e.g., the organization of special classes) and actual learning experiences gained by the child. It is probable that two programs similar in procedure will differ qualitatively in their educational value.

It should be clear that this study did not examine the relative merits of different types of special provisions for the gifted. Rather, it compared a particular special grouping program with the kind of treatment ordinarily provided within a regular classroom setting. Although these two settings were found to be about equivalent in terms of most of the variables studied, the possibility that the special grouping program had positive or negative effects on other variables of interest to the school is yet to be explored.

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RESULTS FROM SPECIAL TECHNIQUES FOR

TEACHING EMOTIONALLY DISTURBED CHILDREN

E. LAKIN PHILLIPS
NORRIS G. HARING

EFFORTS to develop special classes in average school settings for emotionally disturbed children have been few. In a practical way, all schools have to cope somehow with emotionally disturbed children, whether they exclude them from school, demote them, promote them, or just permit them to flounder. In the past the emotionally disturbed child has been considered almost completely outside the pale of the school's responsibility. This attitude is beginning to change, giving rise to experimental programs for dealing with emotionally disturbed children in the school setting. Since so few can afford expensive residential centers or prolonged psychological or psychiatric help, it appears necessary that schools move in the direction of providing practical services for this group. An experiment in Arlington, Virginia, was a step in this direction.

The project was initiated two years ago. The interim results, both qualitative and quantitative, are encouraging. Plans for expansion of the program are under consideration.

Procedure

Working within the confines of the average school, a proposal for classroom management and education of the school system's most severely emotionally disturbed children was activated. Referrals came from principals, classroom teachers, visiting teachers, school psychologists, and in a few cases from parents. The school assumed the obligation of developing ways to cope with the behavior of the children as well as stimulating them educationally. Thus a two-fold purpose—improvement of the emotional and educational condition of the children—made up the objectives of the special classes.

The major hypothesis in handling the emotionally disturbed children was that such a child lacked *order* or *structure* in his environment and in his emotional-educational life. To remedy this condition, and to help promote growth, ways were sought to increase the definiteness, the structure of the daily classroom experiences. It was also necessary to involve the parents through parent-discussion group meetings approximately once a month to assist in the undertaking and to help with continuity in handling the children between home and school experiences.

Criteria for Selection

Criteria had first to be set up as to what types of children would be acceptable. Four criteria were arrived at after much preliminary discussion. They were:

1. Children showing hyperactive, distractible, attention-getting behavior; or withdrawn, uncooperative behavior; or those showing both tendencies.
2. Average or near-average intelligence (recognizing, however, that tested intelligence may be an underestimate owing to the emotional disturbance).
3. The child having been in the school making the referral at least one year (preferably two) and having been one year (preferably two) educationally retarded.
4. The likelihood that the parents would and could cooperate and attend parent group meetings and generally support the school's efforts.

Since the study was done with elementary age children, grade levels two to five, an implicit cri-

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This article is based on a paper presented at the 1958 Christmas meeting of CEC-Section Q, AAAS.

terion was that the referred child not be too near the junior high level in order that follow-up time would be available before the child moved from the elementary school level.

Orienting the Teachers

The procedure was to orient and carefully instruct the two teachers of the two special classes in methods of handling emotional and educational problems. Closely following the general aim of increasing order or structure, many details were worked out pertaining to the daily routine. Preliminary conferences with the teachers were held by the authors, and weekly conferences and observations of the classroom climates were carried on for several months after the activation of the classes at the beginning of the fall term, 1957. As the teachers settled into the routine they posed increasingly specific and far-reaching questions of procedure, method, purpose. These questions forced us to come to terms in more specific ways as the general aim of the structured classroom environments got under way. Some specific problems were the following:

Assignments and skill limits of each child. This was determined initially on the basis of intellectual and achievement tests, and on the basis of the personal file. Modifications were necessary in case that a child would, for example, dislike arithmetic, or one who was especially poor in spelling. The children often tried to postpone work on disliked subjects, or acted as if they did not understand direction sufficiently well to proceed on their own. To remedy these conditions assignments were made that were very brief and a close, consistent follow-through was maintained by the teacher. As the teacher got the "feel" of each child's attitudes, she could gradually give the child more independence in his work. Piece by piece, day by day these tolerances and limits were extended until by the end of the first year nearly all of the group were able to work alone for long periods of time.

Seating and movement limits. In addition to regular seats in the classroom (for 8 boys), there were two small work tables, about 2½ x 5 feet, and five "offices" or booths. The booths were used to get the child to work under minimum distracting conditions, to increase the tolerance for independent work, and to handle restless, hyperactive and socially disturbed behavior. Sometimes, too, the children considered their "offices" as a haven when they felt poorly or were possibly the object of derision from others. The booths lined one wall of the classroom and were about 3½ x 3½ feet with a movable chair and a fixed table-level desk across the back of the booth. Sometimes children stored their supplies in the booths as well as in the assigned desk each had.

Play and recreational limits. Children were held to the completion of assigned work before play or recreational opportunities were available. Most of the academic work was done in the morning; physical education, art, music, free play periods, etc. came in the afternoon, *provided* the child's work was up to par. Brief periods allowing for free play with art materials, or clay were sometimes sandwiched in during the morning work periods if the child had completed work assigned him. Care was exercised not to allow the recreational pursuits to crowd out assigned work, and assigned work had a constant, first-order priority at the beginning of each school day.

Free-moving privileges. These privileges include access to the rest rooms, moving about in the classroom, moving from group to individual desk work, occasional errands to the school office, and getting in line for lunch. Children asked permission to leave the room. Tasks and errands were distributed weekly among the children so that all got a chance to carry on "official business" with the school office. The children were free to move from desk to "office" to work bench provided the move was closely related to the assigned work. Free roaming about or movement in lieu of doing work was kept to a minimum. To preclude the development of fatigue, the group would be taken at appointed times for a walk, for a "seventh inning stretch" during the morning work period. Water in the classroom sink was kept off; art materials were kept under cover so as to minimize distraction. The children knew these materials were available after they qualified to use them, and it did not take long to establish these elementary limits on the use of supplies.

Social-emotional conduct limits. Some of the children provoked others unrelentingly, especially

at first. Others often came to school in a "bad mood" and hypersensitively interpreted classroom problems personally and might refuse to work, to communicate, to participate as a retaliative measure. These were difficult situations to control effectively and constructively. Several guidelines helped: Do early what you would normally be required to do later (in the way of setting behavior limits); do not participate with a child who is upset about his upset—let him calm down first; give one warning, then act; isolation was normally the preferred, and most effective, technique when a child's behavioral disturbance adversely affected others; and a specific emphasis on solution or resolution to a problem was always held by the teacher in contrast to queries of why the child did thus-and-so.

With the recurrent conferences each week or two, the teachers could accumulate instances of problems they had handled, in contrast to those they felt they had not coped with successfully. It was helpful to have contrasting success-failure instances for discussion; in time, this procedure cut down on the failure instances and increased the confidence of the teachers that they could deal with about any problem that might present itself. It was simply a matter of successive approximations to more desirable and constructive solutions to problems, both academic and emotional-social. The general guidelines referring to "increasing or firming up structure" were held to; the specific solutions to problems fell under this general aim and it was often necessary to shift and maneuver, to roll with the punches to keep the structure both firm and flexible.

Experimental Design

Some mention should be made of the selection of cases. After the request went out to principals about the activation of these classes, eighty-five referrals were received for processing. Since the size of the two classes was to be limited to eight each, a total study population of 30-32 children was anticipated —i.e., 15 or 16 in the two experimental classes and the same number as controls.

The children in the experimental and control groups were compared on the basis of group means and standard deviations as to intelligence, achievement and grade placement. The judged seriousness of the child's behavior was a qualitative problem, but effort was made to distribute this variable evenly between the control and experimental populations. The dependent variables, then, became the educational progress and behavioral improvement shown over time. While the teacher was an important variable in this process, there was no possibility of studying the teacher's role experimentally as to its influence on the child's progress. In a theoretical sense, the role of the teacher was included in the overall aim of increasing structure in the classroom; had there been a failure on the part of any teacher to perform this function, the teacher would simply have been replaced and one put in who could function in the structure-increasing role required by the design of the study. The assumption, then, is that the teacher performed a "standard role" of increasing structure, and that is the extent to which the analysis of this role goes in the present findings.

A second, peripheral control group was also available in one class in another elementary school. This peripheral control group had eight boys and seven girls, not as severely disturbed emotionally but having been described as a group of behavior and achievement problems, and about 1½ years older on the average than the main experimental populations. This group was far from perfect in serving as a control group since the size of the group was twice that of the experimental classes and the severity of the problem was less. This second control group existed under a mostly permissive and non-structured classroom atmosphere, and serves more as a contrast in this respect than in any other.

The teachers of all children in the study were given a rating scale for "before" and "after" ratings. Each child was rated on 26 behavioral items in each of three circumstances: in the classroom during formal, educational pursuits; in the classroom in free, socially oriented group situations; and on the playground in non-academic, free play, but inter-personally related circumstances.

Results

Testing the hypothesis that the socially and educationally structured classroom atmosphere, as opposed to a relatively free and permissive one, would be beneficial, was not subject to easy, clear test in this study. The limitation is owed mainly to the inability to control class size; other relevant

variables seemed to have been much better controlled. Within the limits of this condition, the qualitative and quantitative results follow:

The children in the two experimental (structured) classrooms showed a total educational gain on the California Achievement Test (reading, arithmetic, language) of 1.9 grade levels. They moved from an initial status of 2.30 grade level to 4.20 grade level. This progress was based on a mean IQ level (Stanford-Binet) of 104.52 ($\pm$15.90), which was a pretest. The control group of 15 controls, remaining in a less ordered classroom environment, showed a gain of 1.02 grade levels (from 3.03 to 4.05 grade levels), over a full academic year. The experimental group had a mean exposure time to the structured classrooms of about 6 months, since the two experimental groups were not fully constituted at the outset of the study.

Parallel to this result the children in the second or peripheral control group moved from grade level 5.25 to 6.06, on the same achievement test. The gain of the experimental group over either of the control groups was statistically significant: $p < .05$.

As to behavioral or social-emotional development, the experimental children showed statistically reliable progress in comparison to the two control groups. With each of the three broad variables (each with 26 items rated on a pre- and post-test basis), the experimental group in the structured classrooms gained an average of 1.76 points, compared to a gain of only .05 points for the matched controls, and a gain of 0.936 points by the second, peripheral control group. These ratings were made on a 7-point scale varying from "1" (lowest) to "7." A gain of one unit (1.00) probably represents an average gain toward maturity over one year.

This result shows the experimental groups to have about twice as much gain as the second control group and about 35 times as much gain as the compared controls. A conservative conclusion, even taking differences in class size into consideration, suggest some superiority for the structured classroom on the rated variables.

In addition to these findings, other qualitative results are reported. One of the 15 children from the experimental population progressed so well that he was allowed to return to his "home" school after seven months. A two-months follow-up on his adjustment showed him to continue to make excellent academic gains and moderately good social-emotional gains. On the other hand three of the matched control children had either to be removed to private schools or to go into individual psychotherapy due to a continuance of their adjustment problems. The teachers of these children did not know of the fact that the children were serving as controls, or even that they were in any study. The three children had three different teachers; they were not from the same school, hence there was no cumulative effect on the teachers or the principal from any combined pressures by the three children.

Other qualitative indices emerged frequently from conferences with parents and from the parent discussion meetings. Most of the parents in the experimental group felt that this experience was the first truly constructive one that their children had experienced. The children, too, expressed their satisfaction with remarks like the following:

"We like it here."

"We like a strict teacher."

"We know what we're supposed to do."

Their complaints were more like those of the normal child in the classroom, not the continuous, strong opposition to teachers and to school authority which had characterized their behavior prior to admission to the special class.

Interpretation

The advantages of a structured type of classroom environment for meeting the needs of emotionally disturbed children exceed those reported upon here. The average teacher can probably improve the conduct and achievement of her children by looking for the "firming up" instances of unclear structure. The average teacher can probably handle a class of the type of youngsters studied herein provided she has some direction and support from more experienced psychologists, special education experts, and principals. Good teaching supervenes; good teaching consists in knowing each child well and in having the ability and perseverance to give the specific direction to the child which is necessary for his growth and progress. A structured classroom is one in which clear direction, firm expectations and consistent follow-through are paramount; this is a healthy state of affairs for normal children as well as seemingly necessary for emotionally disturbed children.

The Relationship of Learning Rate and Developmental Rate

Many statements concerning the learning rate of retarded children are undoubtedly made by persons who (a) are unfamiliar with the basic concepts involved in an understanding of the learning process, (b) have failed to differentiate immediate and sequential learning, or (c) lack an understanding of child development. Often they have not differentiated in their own thinking between learning and development, using the terms interchangeably. As a result, articles concerned with development rate have appeared where the author has used the term "learning," and in other writing, the author has used a reverse of the terms and concepts involved. This has resulted in a great deal of confusion on the part of readers. The confusion on the part of authors has thus been compounded to the extent that numerous dogmatic statements appear in print concerning the learning abilities (or disabilities) and characteristics of retarded children that are erroneous in light of interpretations that can be made concerning the findings reported in the learning studies.

When concerned with child development and rate of development in general, one may be referring to the growth rate of an individual or group in one or more of a number of somewhat discrete and only distantly related areas—physical, mental, academic, social and so forth. The mentally handicapped group for education purposes is defined (as the name implies) upon the basis of retarded or slow intellectual development. This is reflected in the theoretical meaning of the IQ which, on most standardized intelligence tests, is a ratio showing the relationship between intellectual growth and number of years lived. The individual's present intellectual behavior upon a selected sample of tasks is compared to the average responses of a large sample of the population of the same life age.

Thus, a child with an IQ of 75 has an intellectual developmental rate three-fourths that of the average or normal. A child with an IQ of 66 or 67 is developing intellectually at two-thirds the rate of the average or general population. It will, consequently, take this individual from one-fourth to one-third times longer to "pass through" a specified developmental growth period than is required for the "average" or normal child. Assuming each of three children has an intellectual developmental level (mental age) of 6-0 years, the normal child will achieve one year of intellectual growth in one chronological year, and after a one-year interval will have an intellectual developmental level of 7-0 years. During this same period of time, the child with an IQ of 75 will have grown intellectually 9 months, and the child with an IQ of 66 or 67 only 8 months. The child with an IQ of 75 will require 1 year and 4 months and the child with an IQ of 66 or 67 will require 1 year and 6 months to develop intellectually the one year that the normal child accomplished in a 1 year period of time.

The IQ, therefore, does not provide the observer with an evaluation of the present intellectual power or ability of the individual but is rather derived from this knowledge plus a knowledge of the individual's life age. On such standardized instruments as the *Stanford Binet,* the intellectual developmental level (mental age) may be derived from a knowledge of the developmental rate (intelligence quotient) and life age (chronological age).

Learning is dependent upon a number of variables of which intellectual developmental level is an important one. This factor will largely determine the maximum complexity and level of learning that can possibly take place at any specified time. Thus, in comparing the learning ability (level, rate, and so forth) of two groups of children at the same intellectual developmental level, and assuming the same degree of readiness to learn in terms of background experiences, attitudes, desires, quality of instruction, and so forth, one would expect that they would learn the skill or concept in the same period of time. Although the two groups (normal and mentally handicapped) may differ significantly on such developmental factors as life age, physical and motor development, or social development, as long as they are equated for intellectual developmental levels, experiences, and previous learnings to insure equal readiness, they should have similar patterns of learning, require the same amounts of practice, and retain equal amounts of the material learned.

The preceding statement should hold true in terms of immediate learnings within the intellectual abilities of the subjects included within the respective group. In the case of learning studies, it should hold true for the younger, normal subjects and older, retarded subjects of the same mental age. This statement would not apply, however, to a sequence of learning activities (such as learning to read, which actually consists of many discrete learnings). Where sequential learning is properly placed in terms of an intellectual developmental scale and each successive learning activity requires (1) greater intellectual maturity as well as (2) previous learning, then the concept of intellectual rate of development as well as the concepts involved in learning must be incorporated into planning for the learning of the entire, total sequence.

The subject with normal or "average" intelligence will learn the sequence in a specified period of time. The subject developing more slowly requires that successive learning be spaced farther apart, thus extending the sequence of learnings over a longer period of time, but no more practice time in learning a specific skill or concept and consequently no more total instructional time to learn the entire sequence should be necessary. The only additional time devoted to skill instruction for the slower group should be in terms of additional review to overcome the factor of forgetting.

Proper application of these concepts can have great implications in regard to classroom instruction and curriculum planning for mentally handicapped children. It essentially means that the teacher of these children can devote approximately one-third of her time to concepts and experiences of a "special" nature while still taking no time away from the instruction of "basic skills" usually considered to be essential as tools that will enable the individual to make continuing adjustments independently.—***G. Orville Johnson, Syracuse University***

COMPARABILITY OF PEABODY, AMMONS, VAN ALSTYNE, AND COLUMBIA TEST SCORES WITH CEREBRAL PALSIED CHILDREN

LLOYD M. DUNN AND RANDALL K. HARLEY

APPRAISAL of the intelligence of cerebral palsied children has passed through three stages. Early efforts involved clinical judgments based on non-standardized behavioral observations. Then followed the stage when modifications of Binet and Wechsler scales were widely employed wherein test procedures were varied from subject to subject and examiner to examiner; of course, the use of norms was, at best, hazardous. Even more recently, new-type tests have begun to appear which are being administered in a similar manner to subjects with and without speech and motor disabilities. These instruments have facilitated the collation of test results on groups of cerebral palsied subjects since standard procedures could be used for the first time.

Purpose

The purpose of this study[1] was to investigate the comparability of four new-type individual tests of intelligence with cerebral palsied children. One test—the Peabody Picture Vocabulary Test (PPVT)—is completely new to the field. Two others—the Van Alstyne Picture Vocabulary Test and the Columbia Mental Maturity Scale—have been extensively revised. The Ammons Full-Range Picture Vocabulary Test is the only instrument which has been available for some time in its present form.

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More specifically this investigation was designed to explore:

1. The distribution of mental age scores obtained by cerebral palsied subjects on the four instruments.
2. Intercorrelations among the four tests as well as correlations between alternate forms of the PPVT and Ammons.
3. Correlations of the four tests with teacher ratings of reading and arithmetic achievement.

Instruments

The Peabody (3), Ammons (1), and Van Alstyne (4) Picture Vocabulary Tests are somewhat similar in design. All three consist of a series of rectangular plates or cards, containing four pictures each. All are individual, power tests of hearing vocabulary and/or verbal intelligence—using oral instructions, pictorial materials, and the pointing (or "yes" or "no") response. To administer the scales, the examiner provides a stimulus word orally as in "Show me *ball*." The subject then points to, or in some other way indicates, the picture on the plate which best illustrates the meaning of the stimulus word. With severely-involved, cerebral

[1]The research reported herein was performed in connection with contract SAE-6425, United States Office of Education, Department of Health, Education, and Welfare. Special appreciation is acknowledged Harold F. Bligh of the World Book Company for making the Van Alstyne and Columbia scales available to the investigators prior to publication date. The assistance of Peabody College doctoral students in psychology, the teachers of cerebral palsied children, and the administration of the Nashville City Schools is also recognized.

palsied subjects who are unable to point or evoke an oral "yes" "no" response, the examiner may point to the four pictures in order on a card, obtaining a "yes" or "no" response for each item in turn by a shake of the head, or some other non-oral means.

The *Peabody Picture Vocabulary Test* (PPVT) is a new test developed by Dunn. It consists of 150 plates arranged in ascending order of empirically determined difficulty extending over the age range 1-6 through 18-0, but having extrapolated age norms below this level. The one set of plates serves for both Forms A and B of the test. For each form, one stimulus word only is illustrated by a plate. The subject is tested from a basal of eight consecutive plates. The raw score for a subject is his basal score plus the number of items answered correctly up to his ceiling. Age, standard score, and percentile norms are provided, based on a standardizing population of 4012 children and youth.

The *Revised Van Alstyne Picture Vocabulary Test* was developed by the World Book Company in cooperation with Van Alstyne. In revising this well-known preschool test which was first published in 1929, completely new pictorial materials are provided. Thirty-two of the words used in the original edition have been retained. Sufficient new words or phrases have been added to bring the stimulus words up to a total of 60. Since one plate is used to test only one item, the test consists of 60 plates. The test is primarily designed for children with mental ages between two and five years, though the age norms have been extrapolated from 2-1 to 10-5. There is only one form of the test. The raw score is obtained by counting the number of correct responses obtained by the subject when the examiner sweeps through the odd numbered of the 60 plates and then the even numbered.

Since its publication in 1948 by Ammons, *The Full-Range Picture Vocabulary Test* has been recognized as an especially useful instrument for testing cerebral palsied children. The unique feature of this instrument is the efficient use made of only 16 cards, each consisting of the usual four line drawings. Each card is used to illustrate a series of words of increasing difficulty, rather than just one word per form as on the other tests. Approximately 85 test words are illustrated in each of the two parallel forms by the single set of 16 cards. Another difference between the Ammons and other tests is in relation to guessing. The authors do not allow the subject to guess, asking him to define words, or point again later in the test to words the examiner thought were guessed by the subject. The test measures over the mental age range 2-6 through adulthood. As in the case of the Van Alstyne only age equivalents are provided for children.

The Revised Columbia Mental Maturity Scale (2) was developed by Burgemeister, Blum, and Lorge in cooperation with the World Book Company. This instrument differs from the picture vocabulary tests in that it does not measure auditory comprehension for the spoken word but rather the ability to select the drawing which does not belong with the others. The items in the lower half of the scale are based on concepts such as color or simple geometric form, but at the upper end, recognition of very subtle relations in pairs of pictures is necessary to classify the pictures so the one which does not belong can be found. The test consists of 100 elongated plates, each containing 3 to 5 drawings in a row. In revising it, 17 of the 100 plates and in the original edition have been replaced, and the order of many of the remaining plates has been re-arranged so as to place the plates in ascending order of difficulty, based on new evidence accumulated in re-standardizing the instrument. The test is designed for children from 3 to 12 years of age. Mental age norms extend over the range 3-5 to 13-11. There is only one form of the test. Raw scores are found by scoring the correct responses in sweeping upward through the 100 plates until the child fails twelve in any sequence of sixteen cards.

Procedures

The subjects used in the study were the 20 of cerebral palsied children attending a three-class special unit for crippled children in one of the Nashville City Schools. There were 10 boys and 10 girls in the group. The children were classified as 10 athetoid, 9 spastic, and 1 ataxia. Degrees of involvement were 7 severe, 6 moderate, and 7 mild. Three of the group had appreciable hearing losses and two had moderate vision defects. Three had no speech, 5 poor, 6 fair, and 6 average speech for age. Eight were non-ambulatory, 6 walked with

Table 1. CHRONOLOGICAL AGES AND TEST SCORES OF THE 20 CEREBRAL PALSIED CHILDREN

CHILD	CA	Md. M.A.	MENTAL AGES PPVT A	PPVT B	AMMONS A	AMMONS B	VAN ALSTYNE	COLUMBIA	RANK RDG. ACH.	RANK ARITH. ACH.
1	16-2	11-11	11-4	13-4	12-6	13-6	8-0	7-1	1	3
2	12-8	10-10	11-0	10-10	13-3	13-9	9-7	10-0	6	2
3	8-10	10-6	10-7	10-5	11-6	10-9	9-3	7-4	9	8
4	13-8	8-11	10-5	8-4	9-6	11-0	8-4	7-0	5	4
5	13-8	8-10.5	8-9	9-1	9-8	11-3	7-6	6-6	4	5
6	11-5	8-10	8-7	7-5	10-9	9-4	7-0	9-1	2	6
7	11-9	8-1.5	8-3	8-0	10-4	10-3	7-0	6-2	11	10
8	11-0	7-9.5	6-10	7-3	9-6	8-6	6-1	8-4	7	7
9	15-3	7-7	7-3	7-5	7-3	10-0	7-9	9-8	3	1
10	8-11	7-2	6-10	7-0	8-0	10-6	7-3	7-1	8	9
11	11-0	6-8	6-1	7-3	7-9	8-2	5-1	5-8	13	13
12	7-6	6-4.5	7-3	6-6	6-3	7-0	5-9	5-3	12	12
13	11-11	6-2.5	4-10	6-6	7-3	8-2	5-9	5-11	10	11
14	11-1	6-1	5-7	5-1	8-9	3-8	4-8	5-1	14	14
15	14-8	4-11	4-5	3-10	7-3	7-0	4-11	4-11	15	15
16	7-3	4-6	4-3	4-2	4-9	7-6	5-1	3-11	16	16
17	7-5	3-11	3-9	3-11	4-1	3-11	4-0	3-6	17	17
18	7-1	3-2	2-7	2-6	3-8	2-10	3-6	3-9	18	18
19	7-1	2-8	1-6	1-10	2-6	2-10	3-5	4-2	19	19
20	11-3	2-7	2-3	2-1	2-6	3-2	2-8	3-9	20	20
MEAN	11-0		6-8	6-8	7-10	8-2	6-2	6-3		
STANDARD DEVIATION	34.35		35.72	36.35	37.99	41.00	23.71	23.93		

support, and 6 walked without support. Fifteen of the subjects used a pointing response while 5 indicated "yes" or "no" as the examiner pointed out the alternates in order. The mean chronological age of the group was 11-0 with a standard deviation of 34.35 months, and a range of 7-1 through 16-2.

The Peabody, Ammons, Van Alstyne, and Columbia Tests were administered in a period of two weeks to the children. The PPVT and Ammons were given during the first week by 14 advanced graduate students in psychology—with tests, forms of tests, subjects, and examiners counterbalanced. The original design called for the Van Alstyne and Columbia to be administered at the same time as the PPVT and Ammons, with all four tests counterbalanced for order of presentation. However, the Van Alstyne and Columbia did not arrive in time and had to be administered in the second week by two examiners in counterbalanced order. Subjects were not given two scales at one sitting. For all 20 subjects, tests were administered and scored according to procedures prescribed in the manuals. Raw scores were then converted to age equivalent norms.

In addition to obtaining test scores, the teachers were asked to rank the 20 cerebral palsied children on reading and arithmetic achievement. Since all three teachers knew all the children it was possible for them to reach concensus in rank ordering. (In arithmetic the teachers estimated a range from a high of Grade 5 achievement to a low of no comprehension for quantitative concepts; the range of reading achievement extended from a high of Grade 7 to a low of poor reading readiness.

Table 1 summarizes the test scores and chronological ages for all 20 cerebral palsied children.

Results and Discussion

1. The mean MA scores, as seen in Table 1, ranged from a low of 6-2 on the Van Alstyne to a high of 8-2 on the Ammons. From Table 2 it can be seen that a significant F ratio was found indi-

Table 2. ANALYSIS OF VARIANCE FOR MEAN MENTAL AGE SCORES

Source of variation	*Sum of squares*	*d.f.*	*Mean square*	*F*	*F .95*
Individuals	112,442.76	19			
Tests	10,629.54	5			
Error	17,844.29	95	2,125.91	11.32*	2.72
Total	140,916.59	119	187.83		

*Significant at 0.05 level of confidence.

cating that differences in mean MA scores could not be attributable to chance at the 0.05 level of confidence. A Hartley test was run giving an F_{max} of 2.99 which did not fall in the critical region. When t-tests were then used on differences between pairs of means, significant results occurred between the three sets of scores, as shown in Table 3.

Table 3. SUMMARY OF t-TESTS TO DETERMINE SIGNIFICANCE BETWEEN PAIRS OF MENTAL AGE SCORES

	PPVT		*Ammons*		*Van Alstyne*	*Columbia*
	A	*B*	*A*	*B*		
PPVT						
Form A		0.02	1.23	1.48	0.66	0.56
Form B			1.24	1.49	0.63	0.53
Ammons						
Form A				0.29	2.06*	1.96
Form B					2.29*	2.20*
Van Alstyne						0.13

*Significant at 0.05 level of confidence.

The subjects scored significantly higher on Form A of the Ammons than on the Van Alstyne; their scores on Form B of the Ammons were significantly above both their scores on the Van Alstyne and Columbia (see Table 1).

Examination of the descriptive data in Table 1 indicates the following: (1) MA's on the PPVT within the range 2-0 to 4-5 were consistently lower than those on the other tests. This may be because the PPVT has more bottom than the other instruments or may be an artifact of standardization populations. (2) MA's on the Van Alstyne and the Columbia were consistently lower than scores on the other two tests from 8-0 and up. In the case of the Van Alstyne, this is probably due to lack of top; the test was only intended for children with mental ages between two and five years. The depressed scores on the Columbia cannot be so easily explained since the test is intended for children from 3 to 12 years. Perhaps cerebral palsied children have special difficulty with the abstract pairing and discrimination process required at the upper levels of this test.

2. Correlations between sets of mental age test scores are summarized in Table 4. These were computed by the Spearman rank-order technique. As was expected, because of the wide range of ages of the 20 subjects, these coefficients were quite high. No doubt, with a more homogeneous group of cerebral palsied children, they would not have been so large.

Table 4. CORRELATIONS BETWEEN PAIRS OF MENTAL AGE TEST SCORES

	PPVT		*Ammons*		*Van Alstyne*	*Columbia*
	A	*B*	*A*	*B*		
PPVT						
Form A		.97	.91	.92	.94	.82
Form B			.92	.95	.94	.82
Ammons						
Form A				.86	.88	.80
Form B					.96	.81
Van Alstyne						.87

The alternate form reliability coefficient for the PPVT was 0.97 and for the Ammons 0.86. Both tests appear to have sufficient consistency to justify their use with cerebral palsied children.

The intercorrelations between tests generally range around 0.90 for picture vocabulary scales. However, these scales only correlate in the vicinity of 0.80 with the Columbia. This probably indicates that the Columbia may be measuring intellectual factors other than those tapped by the picture vocabulary tests.

3. Intercorrelations of teacher rankings in arithmetic and reading achievement with mental age test scores are summarized for all four tests in Table 5. These were also computed by the rank order technique. All are relatively high positive correlations. It had been speculated that Columbia scores would correlate higher with arithmetic than with reading achievement ranks, and that vocabulary scale scores would correlate higher with reading than with arithmetic achievement ranks. No such tendency is discernible. The only slight, ap-

Table 5. INTERCORRELATIONS OF MENTAL AGE TEST SCORES AND TEACHER RANKINGS IN READING AND ARITHMETIC ACHIEVEMENT

Area	*PPVT*		*Ammons*		*Van Alstyne*	*Columbia*
	A	*B*	*A*	*B*		
Reading	.87	.87	.80	.86	.87	.89
Arithmetic	.90	.91	.80	.90	.93	.93

parent emphasis is that all tests tended to correlate more closely with arithmetic ranks than with reading ranks.

SUMMARY

The present study was undertaken to explore the comparability with cerebral palsied children of three new or revised individual tests of intelligence and one well-established test. The new Peabody, the 1948 Ammons, and the 1959 revision of the Van Alstyne are all picture vocabulary tests. The 1959 revision of the Columbia Mental Maturity Scale purports to measure relationships among pictorial materials. All require only the "yes" "no" or pointing response of subjects. These scales were administered to twenty children with various types and degrees of cerebral palsy. Teacher rankings of reading and arithmetic achievement were also obtained on each subject.

The PPVT was found to have the most and the Columbia the least bottom of the four tests. Older cerebral palsied children obtained lower mental ages on the Van Alstyne and Columbia than on the other tests, probably indicating insufficient ceiling especially for the Van Alstyne. Mean Ammons mental age scores were significantly higher than those on the Van Alstyne and Columbia.

The alternate form reliability coefficient was found to be 0.97 for the PPVT and 0.86 for the Ammons. Intercorrelations between sets of mental age scores on the four tests were all found to exceed 0.80. However, picture vocabulary test scores correlated more closely with one another than with the Columbia, indicating, as was expected, that the latter may be measuring different intellectual factors than the vocabulary scales.

Interçorrelations of teacher rankings of reading and arithmetic achievement and mental age test scores were 0.80 and above for all four tests. Contrary to expectancy, there was a tendency for all tests to correlate more closely with arithmetic than with reading scores. It had been anticipated that only the Columbia would do this.

The results of this study indicate that all four tests can be used successfully with cerebral palsied children in predicting school success. The PPVT and Ammons have wider ranges than the other two tests. The Van Alstyne should only be used for children with mental ages below 8-0, and the Columbit for children above 4-0. Both the Revised Van Alstyne Picture Vocabularly Test and the Revised Columbia Mental Maturity Scale appear to be much more satisfactory than the original versions.

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THE EDUCATION OF PHYSICALLY HANDICAPPED CHILDREN IN FRANCE

WALLACE W. AND ISABELLE WAGNER TAYLOR

Professor A. Trannoy, president Association des Paralysés de France, and member of the Council of the ISWC, gave generously of his time and strength in the collection of the data on which this article is based.

THE republic of France is the third largest country in Europe with an area of 213,000 square miles and a population of 44,000,000, providing a population density of 207 per square mile. The school-age population (6 to 14) was estimated at 4,324,000 as of January 1, 1953.

Elementary education is free and compulsory for children between the ages of 6 and 14. Public secondary education is also free. All teachers and other staff personnel are civil service employees of the national government. Local governments also receive aid for school construction and maintenance.

In addition to the public schools, there are many private schools, the majority of which are Roman Catholic. Most of the public schools are controlled by the Ministry of National Education, but some, like the schools for the handicapped, come under the control of other ministries.

The first schools for handicapped children were those provided for the deaf and the blind. A school for deaf-mutes was opened by the Abbé Michel de L'Epée in 1760 in Paris. The first school for the blind in France was founded in Paris in 1794 by Valentin Haüy, inventor of a system for printing ordinary type in large relief. A pupil and later a teacher in this same school, Louis Braille developed the system of printing with raised dots now known throughout the world by his name. Not till 1919 was the first school for orthopedically handicapped children established—one at St. Fargeau par Ponthierry for post-polio cases.

The blind are usually defined as those with less than 1/10 of normal vision, while the partially sighted are those with vision between 1/10 and 4/10 or 5/10.

The deaf are classified for purposes of instruction into four categories:

1. The totally deaf or deaf-mutes, with at least 80 percent hearing loss, from birth or acquired at an early age.
2. The blind deaf-mutes.
3. The disabled deaf-mutes.
4. The mentally retarded deaf-mutes.

Similarly the hard of hearing are classified into two groups:

1. Children with deficient hearing, partially deaf but possessing an appreciable auditory residue (between 50 and 75 decibels).
2. Children slightly deaf (between 15 and 40 decibels).

All handicaps involving a permanent disability of 80 percent for minors must be reported by law. This is the responsibility of the parents, the tutor, or the guardian, although in actual practice this law has not been enforced.

Statistics on the Handicapped

The following incidence figures for the handicapped are available:

1. The blind—40,000—of whom 10,000 are of working age, and 1800 children up to

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This article is the fourth, in a series, on the education of physically handicapped children in Europe.

age 20, according to 1955 estimates of the Ministry of Labor and Social Security.

2. The partially sighted—4500—an incidence rate of about 1 per 1000 as estimated by the same ministry. However, between 7000 and 8000 is the estimate from schools; this includes all those who have difficulty in following a normal course of instruction because of defective sight.

3. The deaf—4535 deaf-mutes less than 20 years of age out of a total of 11,873,338 in this age category, according to the last general population census in 1946. This figure includes only the completely deaf or those afflicted with a very severe hearing loss.

4. The hard of hearing—no separate figures available.

5. The speech handicapped—about 15,000 children from 6 to 14 years of age in the public schools alone.

6. Neuromuscular disabilities and cerebral palsy — only 17,680 children with motor handicaps reported in the 1946 census. A regional inquiry conducted by the International Children's Center in 1956 and 1957 indicated that for every 100,000 people there were 500 children who had become handicapped before the age of 15. On this basis, as of January 1, 1958, there were 220,000 orthopedically handicapped persons less than 35 years of age who had become disabled in childhood or adolescence.

7. Convulsive seizures—about 10,000 children with epilepsy between the ages of 3 and 14 years, according to estimates based on hospital consultations.

8. Delicate children — about 2000 young persons of school age (6 to 14) with diabetes, according to the French Association of Diabetics. There were 1330 children, under 15 years of age, admitted into sanatoria for treatment of pulmonary tuberculosis in 1956, and 18,752 in preventoria. In addition, 520 high school and university students were cared for in the establishments of the Foundation Sanatorium of Students.

9. The multiply handicapped—no figures available.

Special Classes and Schools

Some physically handicapped youngsters attend regular schools. In general, a child is accepted if his handicap is not too severe and if he has normal intelligence. A few blind youngsters do attend secondary schools in the larger cities, and about 20 blind students each year take university courses leading to a doctor's degree.

Special classes attached to the public elementary school are provided for some categories of handicapped children. While there are no classes for the blind, deaf, or hard of hearing in the regular schools, there are seven special classes for the partially sighted in the public elementary schools in Paris. Speech-handicapped children who are also mentally retarded can attend "classes de perfectionnement" provided for educable children of lower mentality in the regular schools. There are special classes for a total of 120 children with neuromuscular disabilities and cerebral palsy in three regular schools in Paris, and similar classes in the regular schools of Bordeaux, Marseille, and Amiens. There are also 100 "open-air" classes annexed to the public elementary schools, serving 2500 school-age delicate children. However, there are no special classes for children with epilepsy, or with arrested pulmonary tuberculosis.

There are no separate day schools as such for the physically handicapped. However, many residential institutions, such as those for the blind, accept day students.

There are 24 residential schools for the blind, and generally the partially sighted may also attend them. Four of these institutions for the blind are public, and of these, three are municipal. Nine of the 24 institutions offer vocational instruction as well as elementary school instruction. There are also 16 trade schools and rehabilitation schools for the blind, some taking adolescents of 14 or 15 years of age, although most are for adults.

There are schools specifically for partially sighted children in Paris, Strasbourg, Lyon, and Toulouse.

The deaf-mute are educated in 39 establishments; seven are public and 32 private. Schools for hard-of-hearing children are located in Paris, Strasbourg, Lyon, and Toulouse.

There are no special residential schools for the speech handicapped. When their speech difficulties are associated with some other deficiency such as deafness, partial deafness, motor deficiency, or

mental retardation, the children are placed in an establishment designed to care for the dominant deficiency.

Treatment or education for children with neuromuscular disabilities and cerebral palsy is given in four types of establishments: hospitals; centers of functional re-education; medical educational centers; and medical vocational centers. Aside from the hospitals, there are 17 centers for treatment, education, and reeducation for children and youth on the primary level who have neuromuscular disabilities, with a total of 1346 beds.

There are few residential schools specifically designated as accepting epileptic children; if these youngsters have a less-than-average IQ, they are accepted in certain medical educational institutes for the mentally retarded.

The open-air residential schools for delicate children include 650 classes and a total of 16,000 children; this total does not include 350 additional classes attached to preventoria and sanatoria. There are "lycées climatiques" for adolescents of delicate health pursuing secondary school studies. These public educational institutions are stimulated in mountainous or coastal regions where the standard curriculum is offered, and where only pupils capable of regular schooling are accepted.

The Homebound and Hospitalized

Educational provisions are made by most hospitals for child patients. Sanatoria and preventoria usually have open-air classes for delicate children in which instruction is given by public school teachers. Children with pulmonary tuberculosis have similar classes in 72 preventoria, and special instruction in 13 children's sanatoria.

The total number of multiply handicapped children being educated is not known. Some are provided for in a specific school for such a group, as in an elementary school for mentally deficient blind girls maintained by the Valentin Haüy Association for the Welfare of the Blind at Chilly-Mazarin (Seine-et-Oise), and in a school for children who are both blind and deaf-mute.

There is no home instruction provided specifically for blind, partially sighted, or hard of hearing children, but the Association of the Paralyzed in France maintains free, voluntary instructional service for about 100 homebound orthopedically handicapped children in Paris on the elementary level.

Correspondence courses are available for nearly all physically handicapped children. They may be provided by either a public or a private organization, with the latter receiving government subsidies. Between 4000 and 5000 physically handicapped persons are served in this way.

The National Center of Instruction by Correspondence of Vannes offers free primary, secondary, technical, and higher instruction which conforms to official courses of study. The Ministry of National Education appoints the teachers who use in curative or re-educative establishments the materials distributed by this Center. Radio and television programs are used to supplement the material sent by mail. There are between 30 and 40 teachers who assist patients in institutions with their studies. Also the private organization "Auxilia," with the aid of volunteer teachers, offers free courses on any level to those immobilized for a period of at least six months. Handicapped persons may of course take advantage of the opportunity for correspondence courses available to the general public.

Special Services

When a speech handicap is associated with another handicap such as auditory deficiency or cerebral palsy, speech therapy is a part of the total treatment for the major disability. The child who apparently needs only speech correction is first examined in orthophonic consultations in hospitals, child guidance centers, or psycho-pedagogical centers for secondary school youth. He receives a medical and a psychological examination by medical specialists (otologists, phonetists, or psychiatrists) and psychological specialists. He then receives corrective treatment from orthophonists as an "externat" or day patient, and is eventually given psychotherapy. In Paris, there are 10 hospitals offering both diagnosis and re-education. There are also several in the provinces where free treatment sessions are scheduled at regular intervals throughout the week.

Children with neuromuscular disabilities are referred to the Center for Motor or Functional Re-education, which provides educational as well as medical services. The physician, teacher, psychologist, physical therapist, occupational therapist, social worker, and other specialists cooperate as a team to provide total treatment in accordance with modern rehabilitation concepts.

Epileptic children may have consultations in any of the 300 child guidance centers located in the cities of France. They also may enroll in "classes de perfectionnement" connected with 20 different psychiatric hospitals. Help may be given in any one of the four specialized medical-educational establishments, or in appropriate cases the child may enter one of the institutions for the mentally retarded.

The open-air classes of residential schools enroll children with a temporary physical deficiency, and delicate children. These schools have been found particularly helpful for children from unhealthy home environments.

The different specialized services keep a medical, psychological, educational, and social dossier which permits the giving of authoritative advice to parents when the handicapped child leaves the institution.

Transportation is provided for handicapped children only in special circumstances. Day students attending institutions for the blind or for the deaf must be transported to and from school by their families. Special tickets can be purchased at reduced prices from the national railways at the beginning and the end of vacation periods.

Recreation and Vacation Programs

Recreational programs are provided for all groups of the handicapped. The blind enjoy various sports such as swimming, as well as concerts and special holiday festivities. Similar activities are provided for the partially sighted who share the programs for the normal or for the blind, depending on where they are receiving their education. The deaf in residential institutions visit movies, museums, or points of interest. Children with pulmonary tuberculosis enjoy radio, television, libraries, the theatre, and social gatherings.

Vacation colonies provide summer holidays for many handicapped children such as the blind, the deaf, the orthopedically handicapped, and the delicate.

Extension programs have been organized that make it possible for handicapped boys and girls to participate in organized scouting. These organizations for Boy Scouts and Girl Guides also correspond regularly with the isolated. There are scout troops wherever there is a sufficiently large number of disabled youngsters, as for example in the schools for the orthopedically handicapped at Garches, St. Fargeau, and Les Mesnuls.

Augmenting the Program

There are some preschool programs for physically handicapped children. Most institutions for the blind admit children when they are three or four years old. In addition to maintaining a nursery school, the municipal institution for the blind in Paris advises parents and helps them to plan activities for their children from infancy on. Similarly, children with neuromuscular disabilities participate in organized kindergarten activities in some localities.

Special adjustments in the school program are often made for physically handicapped children. For example, as in other countries, the average class size is less than for normal children. Classes for the blind average between 10 and 15 pupils, those for the deaf 12, and those for the crippled 15, in contrast to an average class size of 40 pupils per teacher in the public schools for normal children.

The special equipment and instructional methods used for the handicapped are similar to those found in most other countries. For example, the Braille tablets and machines, the musical instruments, and the relief maps and diagrams for the blind are characteristic of provisions for this group. The deaf use individual and group hearing aids. Incidentally, the manual language is prohibited, and only lip-reading and speech are taught. Crippled children have special sliding shelves, tables adapted for children in wheelchairs, etc.

Vocational Preparation

Vocational guidance, training, and placement are provided to some extent for children with all categories of handicap. For example, certain establishments for the blind and deaf such as the national institutions in Paris provide aptitude testing and counseling services. The "département" centers of vocational orientation and the instructors in institutions have charge of such guidance and counseling in the provinces.

A variety of vocational training is available for the blind. For instance, in the National Institution for Blind Youth in Paris, 45 percent of the instruction is devoted to musical studies, and 22 percent to industrial activities, whereas the Center for Vocational Training provided by the Valentin Haüy

Association gives training in brushmaking, basket-making, chair-caning, switchboard operation, stenotyping and dactylography, piano tuning, piano and organ instruction, therapeutic massage, and for women only, instruction in household activities.

In general, the institutions for the deaf, like those for the blind, give vocational instruction between the ages of 14 and 20 or 21. A year of vocational orientation is followed either by several more years of specific vocational training in the institution itself, or by a period of five or six years' apprenticeship. In this program, five or six hours of daily trade training is supplemented by two to four hours of instruction in the institution itself. Supervision of part-time pupils is an institutional responsibility. This training most frequently stresses carpentry, tailoring, and shoemaking for boys, and needlework, dressmaking, machine-knitting, and household management for girls, but is not limited to these.

Various centers for those with neuromuscular disabilities provide vocational training for men in fields such as horticulture, basket making, brush making, rug making, shoemaking, carpentry, watchmaking, bookbinding, typewriter repair, mechanics, radio work, comptometer operation, photography, and hairdressing, and for women in a more limited number of skills such as basket making, office work, dressmaking and cutting, fine lingerie, and embroidery. For those with arrested pulmonary tuberculosis the vocational opportunities are very similar, with the addition of masonary, plumbing, and painting for men, and comptometer operation, maternal aid, and auxiliary child nursing for women.

Epileptic children and delicate children receive their guidance at regional centers, in schools or hospitals or from social workers. Epileptics get vocational training in a day center at Gennevilliers provided by a national inter-professional association for training in manual work, which pays them nominal wages for landscaping and gardening work.

Teacher Training

Teachers of the physically handicapped child must have the basic training of an elementary-school teacher. Since no actual experience in the teaching of normal children is required, work may be started immediately to qualify for the various types of certificates or diplomas available for specialized branches:

Certificate of aptitude for general instruction of blind or deaf-mute children, with options.

Certificate of aptitude for musical instruction of the blind.

Certificates of aptitude for physical education of the blind and of the deaf.

Certificate of aptitude for vocational instruction of the blind and of the deaf, with various options.

Certificate of aptitude for the instruction of backward children.

Certificate of aptitude for instruction in open-air schools, which like the certificate of aptitude for instruction of backward children is usable for special instruction in general.

The national government grants diplomas to special education teachers licensing them for a specified branch of special instruction. Teachers in national institutions for the blind and for the deaf are certified by the Ministry of Public Health, while the Ministry of National Education certifies teachers of the blind and of the deaf in departmental institutions. Orthophonists and teachers in open-air schools are also certified by the Ministry of National Education.

Teachers of the blind and of the deaf are prepared through inservice courses varying from two to five years in length. Requirements differ according to whether the institution is national, departmental, or private; national and private establishments in general exact higher requirements than the departmental ones. The necessary specialized training may be obtained in brief special sessions such as those held in Nantes during school vacations for teachers of the deaf and the blind. Higher level training for "professeurs" of the deaf is given at the National School of Public Health at Paris, and controlled jointly by the Ministries of National Education and of Public Health. Some candidates for certificates take the correspondence courses given by the National Center for Instruction by Correspondence.

Teachers in special classes for the hard of hear-

ing must have the first-degree certificate for teaching the deaf-mute.[1] They must be qualified "orthophonists," as must teachers of the speech handicapped, either in institutions for the deaf or in special speech-correction classes. Certified speech correctionists must have had an education at least equal to the baccalauréat, taken courses in psychology and phonetics, and had inservice training in orthophonic service.

Training for teachers of children with neuromuscular disabilities, tuberculosis of the bones and joints, and pulmonary tuberculosis (children hospitalized in aeriums, preventoria, sanatoria, and rest homes) varies according to the level of instruction. Fifteen weeks' training is required for the special certificate of aptitude for instruction in open-air schools. This is combined with inservice experience. Some experience in teaching normal children is preferred.

Teachers of the cerebral palsied must have the same certificate of pedagogical aptitude required of those teaching the mentally handicapped. Again inservice training is emphasized, and some experience in teaching normal children is considered desirable, but is not mandatory.

Special teachers in general receive a slightly higher salary than teachers of normal children. There are many different levels or teaching ranks defined in the French educational system, with a specified base pay and system of increments for each level. The special teacher is classified for pay purposes on a level somewhat higher than that of parallel teaching positions in the regular schools.

Laws for the Handicapped

Beginning in the late nineteenth century, a variety of legal provisions have been made specifically for the handicapped. The principle of compulsory education was written into the law of 1882, and a decree issued in 1884 used certain texts in this law as a basis for organizing instruction for the blind and deaf-mute. Special social benefits for these groups were prescribed in a decree on November 29, 1953. This decree also made compulsory the notification of all forms of handicap constituting a permanent loss of 80 percent capacity, and stated that the expenses of maintaining minors in establishments providing care or specialized instruction could be paid from public funds.

Laws affecting those with tuberculosis are the general law of October 31, 1945, and the decree of January 6, 1950. These provide for vocational training or retraining, and the organization of establishments for recuperation and convalescence.

Among general legislative provisions, the decree of January 30, 1959, strengthened the law of August 2, 1949. This provided for: a "carte d'invalidité" according some special benefits; an invalid's pension equal to that of the non-handicapped with additions in cases where special care is needed; and unemployment compensation for those who have served apprenticeship or have been rehabilitated but for reasons beyond their control cannot work. Government aid to handicapped children and adolescents was started under the law of July 14, 1905, which provided assistance from school-leaving age on for the handicapped supported by their families. Also the law of August 2, 1949, amended on April 19, 1952, provides social protection for the blind and severely handicapped. Child victims of World War II are provided for by the law of August 6, 1947, and the decree of October 20, 1947.

Various forms of social welfare are specifically applicable to the deaf-mute and hard of hearing. There are ordinary family allocations, social aid, and social security, though the last is not given to the hard of hearing unless some improvement in their hearing seems possible. A special allowance is given to parents of limited means who have deaf children less than 15 years of age with a permanent loss of capacity of at least 80 percent. If any of the deaf happen also to be children of veterans or war orphans, they receive the usual pension allotted to these groups.

Responsibility for special education is divided between the Ministry of National Education and the Ministry of Public Health and Population. The latter ministry administers and supervises the public institutions for the blind and the deaf, whereas the private institutions for these groups are under the control of the "département" where they are located. At the same time the certification examinations for teaching personnel in the four schools for the blind that are either departmental or municipal are under the control of the Ministry of National Education. The Ministry of Public Health

[1] There are first-degree and second-degree certificates for teaching the deaf-mute, the second degree requiring the more advanced training.

and Population administers the examinations which teachers of the deaf must pass in order to be certified. The teacher-education program is determined likewise by the Ministry of National Education, but the program of instruction for the children themselves is determined by the institutions concerned, and controlled by the Ministry of Public Health and Population. In this ministry there is a special bureau in charge of the education of deaf-mute children, and another for the administration of social aid to them.

This division of responsibility presents certain difficulties. As a result the blind in France have tried for many years to have their schools placed entirely under the Ministry of National Education, in order to secure uniform regulations concerning such matters as studies, methods of recruiting pupils, and specialization of the establishments.

The salaries of the personnel of the national institutions for the education of the physically handicapped are paid from an autonomous budget of the Ministry of Public Health and Population, and from the budget of Social Aid.

Programs of special education are partially subsidized by subventions from the national government, from "départements," and from communes; by departmental participation according to fixed per capita rates; and by subventions from social security family allowances and social aid.

Voluntary associations play an important role in the education and welfare of the physically handicapped in France, especially in the case of the blind. The majority of the schools provided for the handicapped are operated by private organizations, as for example 83 percent of those for the blind, and 82 percent of those for the deaf. Several magazines are issued for the blind public by voluntary societies interested in this group. These and other organizations foster cooperation with related international groups.

French Plans for the Future

Special education in France is on the threshold of some important changes. The De Gaulle government has moved to carry out the reform measures discussed for so many years, and finally enacted them into law on January 7, 1959. The entire program has been under study by the Ministry of National Education for the past year-and-a-half, and the administrative regulations specifying programs and procedures should be issued soon. One decree of interest to readers of EXCEPTIONAL CHILDREN is headed "Education of the Maladjusted," and states: "This education, which should be provided to at least six percent of the children in France, is to be developed. . . ." Another important decree titled "Special Education" says: "Classes or special establishments shall be set up for children whose physical or psychological condition prevents them from receiving their education in normal conditions. Such classes or establishments which provide a specially adapted general and vocational training, shall be opened by the *communes*, groups of *communes*, *departments*, or by the State."

It seems likely that the handicapped children in France will benefit from these proposed changes.

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If you're a Westerner, the location of our convention city is just that much more convenient. If you're an Eastern, Southern, or Mid-western CEC'er, the call of the open vistas the touring 'cross country, and the anticipation of California hospitality will be added incentives to meet with fellow Council members at Los Angeles' Biltmore Hotel in April.

Program Chairman Jack Birch and his committee are planning to make this CEC International Convention a professional highlight of 1960. Plan to be "in" on this event!

DENVER'S BOETTCHER SCHOOL OF THE AIR

MARTHA PRATER
CATHERINE D. HAYS

Dear Mrs. Hays:

We enjoyed television so much yesterday. It was fun to see you and Mr. Samuels. Elizabeth wrote to him.

We all drew pictures of "The Little House in the Big Woods." We're mailing them to our literature teacher. We will write about pioneering in Alaska after Joe and Bill give a report to the class about life in Alaska. They are doing some research.

Your friend,
Brenda

THIS LETTER, written by a young patient in National Jewish Hospital in Denver, seems to answer the hopes of a committee who first met, almost two years ago, to find a way to use educational television to enrich the lives of young students unable to attend regular school.

Denver has a special school for handicapped children — THE CHARLES BOETTCHER SCHOOL — a living tribute to one of Denver's great philanthropic families. The school and its physical facilities are a gift from the Boettcher family who for years has been interested in the welfare of Denver's children. Here, the regular school curriculum, especially adapted to abilities and capacities, is brought by teachers who have special training and understanding of each child's need.

Representatives of a community advisory committee approached the principal of Boettcher School for the purpose of investigating the possibility of presenting, via television, subject areas that would be of instructional value to home or hospital-bound children. This marked the beginning of a series of exploratory meetings which involved lay representatives of the Boettcher School, the Department of General Curriculum Services of the Denver Public Schools, and representatives of the television staff of the Denver schools.

Subjects for Television

One of the problems eventually faced by the committee was the selection of the subjects to be taught. Again, at the committee level, all areas of interest and value to fourth, fifth, and sixth graders were discussed and considered. Home instruction had been given in English, mathematics, history, and spelling. Although a home-teacher visited each

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child daily, the number of subjects taught had been limited by such factors as the difficulty of supplying to home and hospitals such items as music and musical instruments, art materials and tools, library facilities, and science laboratory equipment. Therefore the four subjects—science, music, literature, and art — were selected to be taught via television. A specially adapted course of study, based on that used in regular classes, was accepted by the Department of General Curriculum Services of the Denver Public Schools.

The next step was the selection of a name for the program. "Boettcher School of the Air" was chosen as the name depicting the ideal and purpose of bringing to handicapped children a specially adapted program of education-via-television.

Classroom teachers interested in becoming the television instructors were invited to try out before an impartial audience composed of parents, teachers, and television personnel. The teacher selected for each subject area then developed student study guides and home study materials which were assembled into packets and made available to students enrolled in the home-teaching program of Boettcher School. These packets included a kit of art materials and a guide, a science home-study guide, an outline of the literature series, and a description of the music segment of the "Boettcher School of the Air" program.

The principal of the Boettcher School supervised the development of the various television lessons, and served as liaison between the children, the hospital or home-teachers, and the television teachers. The television teachers became part of the Boettcher faculty, and "Boettcher School of the Air" became a real extension of this special school. Finally, on February 17, 1958, at two o'clock in the afternoon, the first of the lessons was telecast.

The first semester of "Boettcher School of the Air" closed June 6, 1958 with results that are highly gratifying from the viewpoint of the teachers, parents, and the students themselves. Children in hospitals, convalescent, and private homes had sent a flood of letters to KRMA-TV and to Boettcher School, expressing in childish scrawls, stilted printing, or carefully written penmanship, their appreciation and great excitement over this new part of their school day.

In the words of one hospitalized student:

We enjoyed your stories about the United Nations very much. We enjoy hearing true stories, like about the United Nations. It stands for a wonderful idea of people living together peacefully, no matter what their religion or color are. We try to live together peacefully here in the hospital. We are anxious to hear you again next Tuesday.

Your friend,
Elizabeth

This letter suggests the curiosity and challenge built through these television lessons:

We are very anxious for the science lesson on Monday. All of us, except Betty, would love to touch the snake. Maybe someday you can come to see us or we can go to see you. We're anxious to see the blood circulating in the goldfish. It will also be interesting to see the insects heart beat under the microscope. We love your science class.

Your little friend,
Frank

From a homebound eight-year-old:

I'm enjoying my science, art, literature, music, and bonus. I am having a lot of fun with my art. I'm going to put a design on the big box I play in if my dad doesn't burn it. Thank you for my art kit. It came on my birthday. It is the most wonderful present I have ever had besides my ball and mitt.

Your friend,
Dick

Much can be said about the possibilities for in-service training for teachers, about the importance of television as a source of enrichment and direct teaching for students in regular schools, and the value to confined adults. The first "Boettcher School of the Air" series made contributions in all of these areas. However, those who have been working with this television series, planned as it is for particular children, believe that here is a new and critically important area wherein television can fill an educational gap in an organized and systematic manner. The handicapped and homebound element in American communities has been one for whom instruction has been provided in only a limited and sometimes, unfortunately, inadequate manner. Although Denver has had, because

of the generous concern of the Boettcher family, an ongoing and highly organized program for its handicapped children, we believe that television will make that program even more extensive and valuable for great numbers of Denver area citizens.

Establishing Rapport

The feeling of isolation experienced by children who are unable to attend regular school is one of the greatest difficulties of special education. "Boettcher School of the Air" has built up a fine relationship between television teachers and students in the program. Each child feels a part of a classroom made up of hundreds of children, who, like himself, are unable to attend regular school. Participation and a sense of belonging is real:

> *I love music very much and I love your program. You must be a mindreader. "To a Wild Rose" is one of my favorite songs. We enjoy singing along with your class. We have a girl's glee club and a boy's glee club. Our teacher lets me lead with the singing in the classroom.*
>
> *Your friend,*
> *Betty*

September 29 opened the second semester for "Boettcher School of the Air." Young Brenda, Dick, Elizabeth, Frank, and Betty joined hundreds of other students and enrolled again in this educational program for home-and-hospital-bound children in the Denver area. A modification in content this year brings new lessons in the same four subjects. The same two teachers are continuing in art and science; new teachers are presenting music and literature. Students look forward to using new packets of art supplies, new science guides for the study of animals, new song books and materials for making a music notebook, and a literature guide with exciting descriptions of books to read. Next semester, lessons in mathematics, Spanish, and French will be added to the curriculum.

We look forward to the time when the television presentations will be integrated so closely with the regular Boettcher School program that much of the worry and serious concern which handicapped boys and girls have about attending school, even though physically unable to do so, can be eliminated. By supplying a school-away-from-school, through television, we feel confident that the general program of rehabilitation and preparation for adult life can proceed more effectively and with more satisfying results.

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What Is Special About Education?—A series of reprints from EXCEPTIONAL CHILDREN. Covers the following types of exceptional children: Blind—Berthold Lowenfeld, Mentally Handicapped—Samuel A. Kirk, Deaf—Harley Z. Wooden, Hard of Hearing—Alice Streng, **Gifted—Paul Witty,** Crippled—Romaine P. Mackie, Partially Seeing—Frederika Bertram, Speech Defective——Harold Westlake. Dec. 1952, Jan.-May 1953, Oct.-Nov. 1953. 44 p. 80¢; 2-9 copies 10%; 10 or more 20%.

Order from

The Council for Exceptional Children, NEA
1201 Sixteenth Street, N.W.
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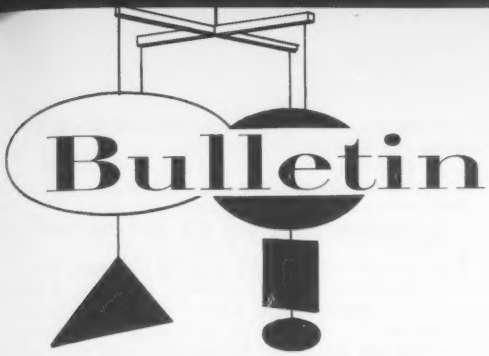


RHODE ISLAND REGIONAL AWAITS CEC CONFERENCE IN NOVEMBER

Special educators from 11 states and six provinces will be on hand when the CEC registration desk opens for business at 1:30 P.M. on Sunday, November 15th.

Sunday will hold special opportunities to participate in—conducted tours, special evening church services, sight-seeing, a special film theatre, and an informal reception. All this points to an entertaining beginning for those who can plan their schedule to arrive early on Sunday!

The Garden Room of the headquarters hotel will be the scene of the informal reception on Sunday evening at 9 P.M. The Rhode Island Council for Exceptional Children will be host for the occasion. Before the social gathering, a specially planned film theatre will be held in the Sheraton Room at 7:30 P.M. Chairman Harry Novack of the R. I. College of Education has arranged for a program of interest to all conference participants. (Details and listing of films may be found in the special preconference *Bulletin* mailed to all those living in this regional area.)

The first general session at the headquarters hotel, The Sheraton-Biltmore in Providence, is on Monday morning.

This is an excellent time to repeat an earlier announcement that persons interested in attending the R. I. Regional from outside the geographic boundaries are most welcome.

As usual, special interest groups planning to hold a meal function will be offered CEC assistance in scheduling their events through our Washington office.

REGIONAL PROGRAM FEATURES NATIONALLY KNOWN PARTICIPANTS

It would be impossible to include all of the speakers and participants at Rhode Island. A quick glance at the program brings these names to the fore.

IVAN K. GARRISON

CEC President Garrison will be the principal speaker for the opening general session. His topic is "Developing the Potential of Exceptional Children." As a leader in programs for exceptional children, President Garrison will feature a subject of importance to every special educator and parent. He is known as an author of numerous periodical articles, a former editor of EXCEPTIONAL CHILDREN, a university lecturer, and for his service as chairman of the committee on mental retardation of the National Study on the Qualification and Preparation of Teachers of Exceptional Children for the U. S. Office of Education.

COOPERATING AGENCIES FOR CEC REGIONAL

Rhode Island State Department of Education
Community Workshops of Rhode Island
Dr. Joseph H. Ladd School
Emma Pendleton Bradley Hospital
Meeting Street School
National Foundation
Parents' Council for Retarded Children
Providence League for Hard of Hearing, Inc.
Providence School Department
Rhode Island Bureau for the Blind
Rhode Island College of Education
Rhode Island Congress of Parents and Teachers
Rhode Island Hospital
Rhode Island School for the Deaf
Warwick School Department

ERIC DENHOFF

Educators and laymen will be intrigued by Wednesday's luncheon speaker, Eric Denhoff, M.D. His topic covers the "Impact of Parents on the Growth of Exceptional Children."

Dr. Denhoff is a pediatrician in private practice in Providence, Rhode Island. His writings in books and periodicals are in the field of pediatric disorders.

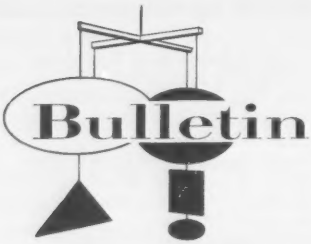
He is the author of the chapter on cerebral palsy in the Cruickshank and Raus book, *Cerebral Palsy, It's Individual and Community Problems*, and co-author of the about-to-be-published work with I. Robinault on *Cerebral Palsy and Related Syndromes: A Developmental Approach to Dysfunction*. His work as medical director, among others, at the Meeting Street School, Children's Rehabilitation Center in Providence, makes him no stranger to our midst.

LAURETTA BENDER

A participant in Section A of the Wednesday morning workshops is the well-known clinical professor of psychiatry, of Columbia University's College of Physicians and Surgeons. She is also known for her work as a research scientist, former head of Bellevue's Children's Psychiatric Division, N.Y.C., and author of numerous contributions to the literature of projective techniques in observation and treatment of children, neurology, education, pathology, and gestalt psychology.

MAURICE LAUFER

"Physical, Psychological, and Social Barriers to Learning" is the address Dr. Laufer will deliver to the second general session of the conference. He is director of the Emma Pendleton Bradley Hospital in Riverside, R. I., and consultant to other area institutions and hospitals. There will be a specially scheduled tour of the Bradley Hospital for conference participants on Tuesday morning, November 17th. The hospital is for children with cerebral dysfunction and psychiatric problems. Dr. Laufer is known for his work in the field of electroencephalography, pediatrics, mental hospital administration, psychiatry, and research.



CEC EXECUTIVE COMMITTEE MEETS IN WASHINGTON

The important decisions reached by the CEC governing board and delegate assembly last April in Atlantic City left much to be implemented. As a result the executive committee met in Washington, August 8 and 9, to speed action along the way. All members were present, including President Ivan K. Garrison, President-elect Jack Birch, Past-President Lloyd M. Dunn, Recording Secretary Mamie Jo Jones, and Treasurer Bob Gates. Staff members present were Harley Z. Wooden, executive secretary; John McCormick, *Journal* editor and director of consultative services; and June B. Jordan, director of membership and sales. Committee chairman present was Leo Connor for legislation.

A brief resume of committee actions follows:

Record Keeping

A Remington Rand membership punch card system, using a Scriptomatic process for addressing, to replace the present metal plates, was adopted. It will be put into effect as early as the conversion can be made.

There are several facts of interest concerning this change:

1. It will be the least expensive of all the more modern methods, because NEA has converted to it and recently installed adequate equipment to provide, at nominal cost, prompt addressing service to its departments
2. It will no longer be necessary for CEC to send records out of the office for making address plates; the Scriptomatic imprint can be placed on the cards by the staff and the record filed at once
3. The cards can be punched for name, state or province, type of membership, and other pertinent information for machine tabulation on NEA equipment; the same or other cards can be developed to carry a variety of data for studies the membership may wish CEC to make.

The committee instructed the central office to review additional specific potentialities for CEC of the process and to report back at an early date.

Awards and Citations

In response to requests from chapters and federations for supplies that may be purchased for purposes of awards and citations, the committee instructed the central office to prepare plans for making available such items as:

1. Past-president pins, buttons, and plaques for local chapters, state and provincial chapters, federations, and divisions
2. Citation certificates for distinguished service.

The pins and buttons will all be of the same quality; the distinguishing feature being the color of the border and the wording. No die will be purchased for making a given type of pin, button, or plaque until after the first order for one has been received. Therefore, the service will be developed as demands dictate.

Prices for the above will be quoted at cost of manufacture, plus handling. No profit is planned.

Constitution and Bylaws

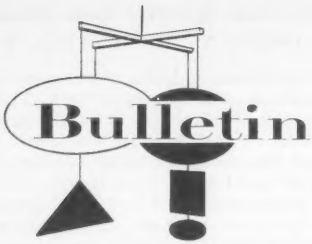
There is an increased interest by the U. S. Internal Revenue Office in attempting to identify those organizations, whose activities it can interpret as being more of a business than an educational, welfare, or religious enterprise. Likewise, there is an increased vigilance by the New York State Department of Social Welfare to identify all types of solicitation of funds whether in the form of welfare drives, foundation grants for research, sustaining memberships, or others. All of this means that the CEC constitution and bylaws must not only set forth Council purposes (as they now do) but they must also clarify the Council's relationship, in one instance, to the National Education Association, and in another, to the Council's divisions, federations, and chapters.

Questions discussed by the committee, in which the entire membership has a stake, include the extent to which each CEC unit is or should be a separate legal entity, does or should possess autonomy of operation, and does or should possess fiscal autonomy. Two decisions were made:

1. That the central office seek the advice of the NEA legal staff
2. That prior to the Providence Fall Regional Conference, the Council reorganization committee, under the chairmanship of William C. Geer, be invited to meet in Washington with the executive committee.

Length of CEC Conventions

Two points of contention concerning conventions have long been the length of them and the conflicts in the schedule of meetings. The most vigorous complaints this year concerned length. As a result, the executive committee instructed the central office to check regarding the possibilities and desirabilities of operating one day less this coming April in Los Angeles. The reaction of the local arrangements chairman and of the California Federation president was in favor of retaining the full length convention. The committee, accordingly, voted by mail to honor their wishes. However, it instructed Ivan Garrison and Jack Birch to explore a restructuring of the time table of the international convention for 1961, including the possibility that the meetings of other organizations follow rather than precede CEC's.



A new innovation was voted a trial run for Los Angeles, on a selective basis, to determine the demand for the service. Program chairman Jack Birch was authorized to invite a few speakers to bring a number of copies of their respective papers to the convention for the purpose of sale at the CEC publications booth. A small duplicating-cost fee will be allowed each speaker interested.

Expanded Program

The committee reviewed the progress made to date on finances and expanded program items considered at Atlantic City:

1. Balancing the budget is an item of high priority. Therefore, new services are being keyed to it with actual expenditures reserved, except in a very limited number of cases, until the receipt of added funds are available for them
2. One more year of cash assistance from the NEA, in the form of a $7,000 grant to help tide CEC over this year, was appreciatively noted as another expression of that organization's confidence in and encouragement extended to CEC
3. The CEC contingency fund, while technically serving as collateral for borrowed funds with which to operate until fall, will remain intact
4. The *Journal* has been enlarged, beginning with the September issue, and a wrapper has been put on it
5. A monograph series on research has been initiated under the chairmanship of Lloyd M. Dunn
6. A book-sized review of research in the education of exceptional children is being planned under the direction of Samuel A. Kirk
7. The activities of the special publications committee have been increased to provide practicum materials, both for teachers and administrators.

The committee agreed to devote the major part of two days, at its pre-fall regional meeting, reviewing proposals for other services, their potentials, desirability, and costs.

Finances

Treasurer Bob Gates made a report to the committee for the fiscal year 1958-59, which will be published in a later *Journal.*

The committee took two actions:

1. It re-affirmed the need to work closely with the full governing board (the Council's budget-approving body) so that group will be kept fully informed of CEC's financial progress and needs during the year
2. It voted to assign $250 of the budget to the use of the committee on Canadian affairs, which is operating under the chairmanship of T. H. W. Martin.

Legislation

Leo Connor, legislation committee chairman, reported the status of congressional bills of interest. He was instructed to work for the extension, to all areas of special education, the kinds of benefits now enjoyed, under Public Law 85-926, in the field of mental retardation. He also was instructed to exercise initiative in consulting with any group or agency interested in legislation for exceptional children.

The committee considered that a commission or advisory committee, or both, could serve useful, constructive purposes in enhancing the present Congressional study of special education and rehabilitation and voted to explore the matter further.

Membership and Sales

June Jordan reported the development of a handbook and other materials for chapter officers, to be made available later.

The committee adopted a combined system of individual sales and subscriptions to the new monograph series. Specific rates will be announced prior to the publication of the first issue.

National Education Association

President Garrison reported on a number of items:

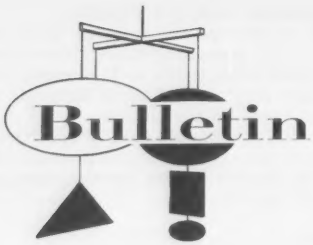
1. The meeting at the NEA St. Louis convention
2. The meeting of NEA department representatives, which he attended in Washington last May
3. The issues of department concern discussed at the NEA's last representative assembly, where he represented CEC.

Personnel

The committee authorized the employment of a new person to fill a combination position of business assistant and convention coordinator. Mrs. Mary Ryan, a graduate of the University of Washington and a former employee in a comptroller's office, has accepted the position.

Public Relations

President Garrison reported on the meetings, particularly those of the committee on the handicapped, of the World Confederation of Organizations of the Teaching Profession. These meetings, attended as an NEA delegate, were held in Washington the last of July and first of August. During the course of that occasion, CEC acted as host to a tea



in honor of the WCOTP committee on the handicapped.

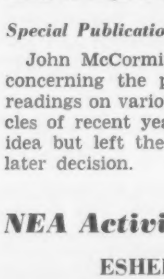
John McCormick reported on the services CEC has given the White House Conference staff on developing a list of studies for background information on the education of exceptional children. The committee in recognition of the value of various state studies, suggested that he contact state CEC presidents to inquire what was being done on that level.

Special Publications

John McCormick also reported on studies made concerning the possible development of books of readings on various subjects, by using *Journal* articles of recent years. The committee endorsed the idea but left the matter for further study and a later decision.

NEA Activities

ESHELMAN HEADS NEA



W. W. Eshelman, supervising principal of Upper Dublin in Fort Washington, Pa., is the new president of the National Education Association for 1959-60.

The veteran educator succeeds Ruth Stout of Kansas in this office. Dr. Eshelman is a native of Elizabethtown in the Quaker State and has taught and served in administrative posts in Pennsylvania for the past 28 years. He received his bachelor's degree in 1930 from Elizabethtown College, earned a master's degree from Columbia University, and a doctor's degree from New York University.

In addition to holding numerous offices with education associations at local, state, and national levels, Dr. Eshelman's work with NEA includes nine year's service on the resolutions committee, including chairmanship of the group for the 1956 Portland convention, plus participation on the Yearbook Commission for the American Association of School Administrators in 1957 which issued *The Superintendent as Instructional Leader*.

The new NEA president formally began his term in office at the NEA summer meeting in St. Louis this year.

"Praise and Appraise Your Schools" THIS AMERICAN EDUCATION WEEK

This is the theme of 1959's observance and campaign for the week of November 8-14. The annual stocktaking, by 26 million parents and other interested citizens in our schools, will mark its 39th birthday as the adults of today see how those of tomorrow are instructed.

Special educators might well take advantage of the daily topics to enlighten school visitors on the unique competencies necessary for educating exceptional children. In addition, the special needs and facilities necessary for working with special groups of children might be pertinent to the daily themes. Parents coming into the schools might also be provided with general background information on ways to expand the programs for exceptional children in their locale. Here is the opportunity to present special education as part of the total school program in your town.

The daily general topics for the week lay the foundations for complete coverage and discussion of specific aspects of school and society today:

SUNDAY, Nov. 8—THE CHILD: What Does Education Mean To Him?

MONDAY, Nov. 9—THE PARENTS: How Can They Work for Better Schools?

TUESDAY, Nov. 10—THE TEACHER: What is a Teacher?

WEDNESDAY, Nov. 11—THE PEOPLE NEXT DOOR: Who Are They?

THURSDAY, Nov. 12—THE SCHOOLBOARD MEMBER: What Are His Responsibilities?

FRIDAY, Nov. 13—THE ADULT CITIZEN: How Can the Schools Serve Them?

SATURDAY, Nov. 14—THE VOTER: How Does He Make His Decisions on Education?

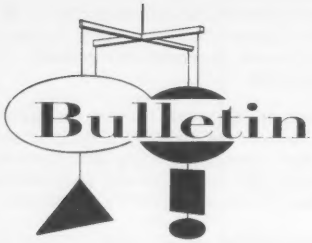
National sponsors of American Education Week are the National Education Association, the American Legion, the U. S. Office of Education, and the National Congress of Parents and Teachers.

Packets are now made up and available to help in the general planning of programs, speeches, and news stories for American Education Week. Cost per packet is $2. Write to AEW, 1201 16th St., N.W., Washington 6, D. C.

NEWS ON DELINQUENCY PROJECT

The NEA Juvenile Delinquency Project conducted a successful and stimulating conference for nearly 200 invited participants last May 14-15 in Washington, D. C. Those close to the delinquency problem were invited to share their ideas on how the school may be more effective in implementing theory for prevention and control of norm-violating behavior.

Initiated in September 1958, the Project has been under the direction of William C. Kvaraceus, on leave from Boston University. Regional conferences,



two published documents, and workshops conducted at conventions of various organizations constitute some of the major activities of the year.

One published document, *Delinquent Behavior: Culture and the Individual,* is now available at $1.25 per copy from the NEA. The second, *Delinquent Behavior: Principles and Practices,* is scheduled for release sometime this fall.

NEA ANNOUNCES PUBLICATIONS AND MEETINGS ON THE TALENTED

NEA's Project on the Academically Talented Student, under the direction of Charles E. Bish, announces the scheduling of four invitational conferences during the 1959-60 academic year. In addition, the Project will release three documents concerning the education of the academically talented.

Specific areas of the curriculum will be the individual theme of the several invitational conferences. The meetings, which will deal with the special fields as they affect the academically talented student, have the following as their subject themes:

1. Art and Music
2. Modern Languages
3. Elementary Education
4. Guidance.

Dr. Bish, project head, announces that publications to be issued early in the school year will involve those on the academically talented in the areas of social studies, English, and administrative procedures and school practices. Additional documents are now being planned on research needs, on the "nature and nurture" of the academically talented, and in the areas related to the conferences mentioned above.

Other Groups

BRILL HEADS INSTRUCTORS OF DEAF

The 39th regular meeting of the American Instructors of the Deaf was held at the Colorado School for the Deaf, Colorado Springs, June 28-July 3, 1959. Over 800 delegates attended the meetings. Richard G. Brill, superintendent, California School for the Deaf, Riverside, who had charge of the workshop type program, was elected president for the ensuing term. Roy Moore Stelle, superintendent, Colorado School, was elected first vice president; Edward Tillinghast, superintendent, Arizona School for the Deaf, Tucson, second vice president; Genevieve Ryan, St. Joseph's School for the Deaf, New York, N. Y., secretary; and Thomas Dillon, principal, New Mexico School for the Deaf, Santa Fe, treasurer. Edward Abernathy, superintendent, Ohio School for the Deaf, Columbus, is the immediate past president. The 1961 meeting of the American Instructors of the Deaf will be held at the Oregon School for the Deaf in Salem, and the 1963 meeting at Gallaudet College, Washington, D. C.

SCHOOLS FOR THE DEAF ELECT OFFICERS

The 31st regular meeting of the Conference of Executives of American Schools for the Deaf was held at the Colorado School for the Deaf, Colorado Springs, June 30 and July 1, 1959. Marshall S. Hester, superintendent, New Mexico School for the Deaf, Santa Fe, is president of the organization. Two new members were elected to the executive committee: C. E. MacDonald, Jericho Hill School for the Deaf, Vancouver, British Columbia, Canada, and Sam B. Craig, superintendent, Western Pennsylvania School for the Deaf, Edgewood, Pittsburgh.

CONGRESS APPOINTS STUDY GROUP ON SPECIAL EDUCATION— REHABILITATION

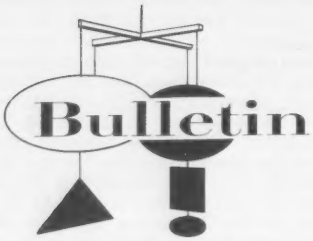
A special study committee has been recently established, under Congressman Carl Elliott's House sub-committee on special education. Merle E. Frampton, of Hunter College and the New York Institute for the Education of the Blind, is the director.

The purposes of the undertaking, as reported in a recent release from the office of the study, located in the Tariff Building, Seventh and F Streets, N.W., Washington 25, D. C., are as follows:

1. To discover the unmet needs in special education and rehabilitation; to screen these findings with the purpose of suggesting practical ways and means of solving the most pressing of these needs.
2. To review and analyze the adequacy of services now available; to ascertain whether there is duplication of services and agencies including waste of Federal funds, if any.
3. To prepare legislation, if necessary, to achieve the foregoing.

NEW MEXICO'S MEMBER FOR THE CEC NOMINATIONS COMMITTEE IS J. JULIA McMAHAN, DEPT. OF EDUCATION AND PSYCHOLOGY, NEW MEXICO STATE UNIVERSITY, UNIVERSITY PARK, NEW MEXICO.

(For complete listing, see page 35 ff. of your September copy of EXCEPTIONAL CHILDREN.)



People

• ROGER P. ELSER is now the state director of special education for West Virginia. He has been a consultant in speech and hearing for the Tennessee State Department of Education.

• ABRAHAM HORWITZ of Chile became director of the Pan American Sanitary Bureau, regional office of the World Health Organization on February 1. At the time of his election to the PASB directorship, he was assistant director of Chile's National Health Service and professor of preventive medicine at Chile's National University.

• LEE MYERSON is now the president of the National Council on Psychological Aspects of Disability, American Psychological Association.

• HAZEL C. MCINTIRE retired on September 30th after a long and distinguished career as director of special education for the State of Ohio.

• GEORGE TARJAN, M.D., president of the American Association on Mental Deficiency, has been appointed to the Council of the American Psychiatric Association.

• HENRY KESSLER, medical director of the Kessler Institute for Rehabilitation, West Orange, N. J., was the representative of the International Society for the Welfare of Cripples at Israel's first National Conference on Vocational Rehabilitation.

• FRANKLIN M. FOOTE became Connecticut's commissioner of health on July 17th. He is nationally known for his years of service as executive director of the National Society for the Prevention of Blindness.

• GWEN RETHERFORD was awarded the Doctor of Education Degree in Special Education recently. She is a special education instructor at Wayne State University, Detroit.

• FRANKLIN C. YODER, M.D., of Cheyenne, Wyo., has been named director of the American Medical Association Division of Socio-Economic Activities. The division includes the Bureau of Health Education, Economic Research Department, and the Councils on Industrial Health, National Defense, Medical Service, and Rural Health of the AMA.

• FRANCES G. KOENIG, assistant professor at Connecticut's New Haven State Teachers College, received her Ph.D. degree in psychology recently, from New York University.

• THEODORE H. WEGENER, former president of the National Society for Crippled Children and Adults, passed away recently. He has long been known for his active participation in the national and state Easter Seal crippled children's programs.

• VERNON JOHNSON is the new director of special education for Tennessee. He has been a regional supervisor in elementary education for that state.

• RONALD E. BRINKLEY, former state director of special education for Tennessee, has been promoted to assistant state superintendent.

• JOHN V. HOTTEL is a new supervisor of special education in the state department of education, Tennessee.

• ALEXANDER W. G. EWING, one of the world's foremost authorities on the education of the deaf and director of the Department of Education of the Deaf at the University of Manchester, England, has been knighted by Queen Elizabeth II. The investiture ceremony took place on February 10th at Buckingham Palace.

• JEANETTE NINAS JOHNSON has been named executive secretary of the Alexander Graham Bell Association for the Deaf, Washington, D. C.

• ISABEL PICK ROBINAULT has been named director of professional education and training at the Institute for the Crippled and Disabled, New York City.

• A. STERL ARTLEY of the University of Missouri is the new president of the International Reading Association. He will serve as president during 1959-60.

• JAMES R. CURRAN is the new director of fund raising for the National Society for Crippled Children and Adults. Before accepting this post, he was director of fund raising and field organization for the Muscular Dystrophy Associations of America.

• S.C. ASHCROFT, George Peabody College for Teachers, Nashville, is in the Phillipines to survey services for visually handicapped children and make recommendations for planning future services. He is under the sponsorship of the American Foundation for Overseas Blind.

• MAURICE H. FOURACRE, CEC past-president and coordinator of special education, Teachers College, Columbia University, New York, was on sabbatical leave for travel and study. His itinerary included Paris, Cairo, Jerusalem, Tel Aviv, Istanbul, Athens, Rome, Madrid, and England. He returned to Teachers College on July 1st for the summer sessions.

ANNOUNCING A SPECIAL EDUCATION PUBLICATION

REVIEW OF EDUCATIONAL RESEARCH, Vol. 29, No. 5

"The Education of Exceptional Children"

- Publication Date: December 1959
- 128 pages (approximately)
- Available to CEC members at half-price rate: $1. per single copy; 2-9 copies 90¢ each; 10 or more copies 80¢ each
- **Prepared by a joint AERA-CEC committee under the direction of William C. Kvaraceus, chairman of the CEC Research Committee and published by the American Educational Research Association, NEA**

PLACE YOUR ORDER NOW WITH

THE COUNCIL FOR EXCEPTIONAL CHILDREN, NEA

1201 SIXTEENTH STREET, NORTHWEST, WASHINGTON 6, D. C.

Study on Causes of Cerebral Palsy and Mental Retardation

An unprecedented attempt to find the causes of cerebral palsy, mental retardation, and kindred defects in children is being launched by the Public Health Service, following two-and-a-half years of intensive preparation. Surgeon General Leroy E. Burney reports that nothing approaching this effort, in either scope or concept, in the field of neurological illness has ever been undertaken. The program is of unusual significance for several reasons:

—It is the first large-scale effort to collect information on all factors that might conceivably have a bearing on cerebral palsy and other neurological disorders, and it is the first research program ever undertaken to collect and analyze this information *before* rather than after such disorders develop.

—It will involve, over a period of five years, a total of 40,000 women in all parts of the country, and the record keeping will begin in early pregnancy and continue into the early years of the children.

—It brings into close collaboration, with each of the women selected for study, obstetricians and pediatricians and specialists in at least a dozen other medical and scientific disciplines.

—A single study design has been developed so that all data conceivably having a bearing on any disorders that might occur among the children will be collected and recorded in a uniform manner.

A total of 16 hospitals and universities across the country are collaborating on the study with the National Institute of Neurological Diseases and Blindness of the Public Health Service's National Institutes of Health. In the past, various efforts have been made to collect such data retrospectively after cerebral palsy and other neurological ailments have developed. The weaknesses in such an approach are fairly obvious. Incidents that might have had something to do with mental or physical injury of a child during pregnancy, during birth, or immediately after birth can be easily forgotten. Or such incidents, after many months, can be misinterpreted or given false values. Under the new program, not only will information on such incidents as virus infections, injuries, emotional disturbances, or other ailments be collected at the time they occur, but they will be considered from various professional viewpoints immediately and recorded in minute detail.

Equally significant is the vast quantity of data that will be collected. Only by analyzing such data on a large scale would it be possible to detect whether particular incidents that occur during pregnancy, during birth or immediately after birth suggest a possible causative pattern.

The project was undertaken on the basis of research studies which suggest that the causes of cerebral palsy, mental retardation, and other neurological and sensory disorders occur during pregnancy or during a period of about a month after a child is born. Thus, should any common denominators involving children with neurological or sensory defects emerge from the new study, a basis for preventive action could be developed.

It is important to emphasize that the new program cannot begin to produce specific results for several years. It should be noted that the complete study of the first child born to a mother enrolled in the study will not be finished for at least six years.

Specific criteria have been developed for selection of the women volunteers so that the total study will cover a good cross section of the population. Women will be enrolled in the study at the rate of 8000 a year for five years. Preparations for the study began in the fiscal year 1956-57. Expenditures for the preliminary work totaled $3 million. Annual estimated costs of the program during the next five years will total $4 million, of which about $3.5 million will be in the form of grants to the participating institutions.—***U. S. Office of Education News Release***

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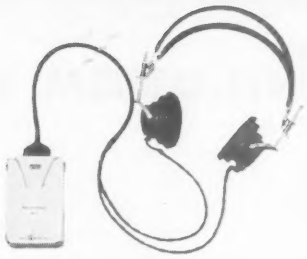

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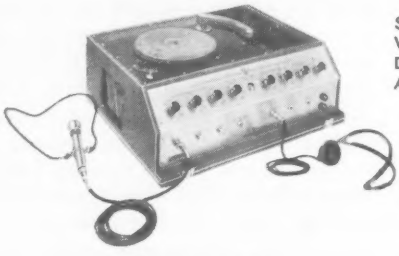

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SOME PROBLEMS CONFRONTING

CHILDREN WITH DEAFNESS

D. ROBERT FRISINA

IN ORDER to view the deaf youngster in the proper perspective, it seems appropriate to observe that problems in the learning and utilization of verbal language results from or in conjunction with a variety of conditions. In order for verbal language to emerge normally, it appears that the central nervous system, the peripheral nervous system, and the psychological well-being of an organism exercise a measure of reciprocity with one another. Deafness without other involvments, on the other hand, is a sensory neural problem. Deafness can be considered from several points of view. For example, there are medical, audiological, educational, psychological, sociological as well as vocational aspects to the general problem. However, let us consider children with deafness as those youngsters who have an organic irreversible reduction in auditory sensitivity of such a nature and extent that precludes ready comprehension of auditory symbols through the ear alone. Stated another way, the deaf child is one who has sustained a loss of hearing either prenatally, paranatally, or during infancy of such a degree and type that, for purposes of developing verbal language, he functions principally as a visually oriented being. In his case, the auditory and tactile senses are subordinate or supplementary modalities.

In general, the consequences of deafness vary according to the age of onset and the degree and nature of the hearing loss. Principal dimensions of hearing include frequency (pitch) and intensity (loudness). These dimensions have been studied quite extensively. On the other hand, the time (temporal) factor in hearing has been explored less.

Along the pitch or frequency dimension, human hearing extends from approximately 20 cps to 20,000 cps. This wide range of frequencies can be restricted a considerable amount before auditory learning is affected. Average female speech extends from 165-10,000 cps; male speech, 100-8000 cps.[1] Theoretically, a child with hearing extending 100-10,000 cps should therefore (other things being equal) receive and develop speech normally. However, if further constriction in frequency response by his auditory mechanism results, the reception of verbal language is likely to be impaired. All cases of deafness manifest some loss in auditory sensitivity, and most cases of deafness as defined above result in a diminution of frequencies (pitches) which the auditory mechanism is able to analyze and encode and/or transmit. Hence the quality and quantity of auditory information arriving at the cortex is likely to be seriously distorted and diminished.

The factor of distortion invokes serious limitations on the child. This follows in spite of high powered amplification units, such as wearable hearing aids or special auditory training units which serve to make sounds louder. Unfortunately, at present, there is no way to make sounds clearer or more intelligible in the type of hearing defect which impedes the proper analysis and/or transmission of auditory impulses to the cortex of the brain.

Audition plays a special role in the organization of behavior in infants and children. Prejudices, biases, and other cultural subtleties are introduced and developed largely through the ability to hear. Verbal language, i.e., a system of verbal symbols, emerges spontaneously principally because of hearing. The lack of it to do so in those congenitally deaf and those deafened during infancy attests to this fact. It is significant that audition provides the primary means through which hearing children develop and use language during the first six years of life. It is not until the hearing child learns to

• DR. ROBERT FRISINA, is director of the Hearing and Speech Center, Gallaudet College, Washington 2, D. C.

read that a visual symbol system begins to influence further language development and its elaboration.

In the hearing child, audition and vision begin to interact during the early weeks of life. However, insofar as visual symbols are concerned, it is chiefly through hearing that verbal language emerges during the first year of life. Receptive language (understanding the spoken word) advances rapidly during the first year, after which single words (expressive language) emerge. Single words are added until 18-20 months, at which time words are put together; and, by 26-30 months, the average youngster is using five and six word sentences. A discussion of the role spoken language plays in facilitating realistic contact with one's environment during infancy and childhood is beyond the scope of this paper. However, to understand the important contribution hearing makes to emotional and physical growth during the early years serves to emphasize the multidimensional problems likely to result from early deafness. For professional workers to assume that the deaf child is normal except that he does not hear in the long run might be a disservice to him. On the other hand, awareness of these deviations, and potentialities as well, should lead to a more realistic approach to the learning problems in the deaf.

Transposing Symbols

There is a basic problem confronting the congenitally deaf child and those in whom the deafness occurred during the preverbal language age. Since language develops spontaneously in the hearing child, vision is used as a stabilizer or reinforcement for symbols derived through auditory perception. This serves to enrich and enhance the relatively effortless development of a set of auditory symbols. There is little question that in the so called "normal" child the predominant sense modality for spontaneous language development is hearing. Another way in which this might be stated is that, throughout the history of the human race, a general pattern of overall development has been accepted. This has been due partially to the ways of nature and partially due to agreements reached by our predecessors. That is to say, there has been handed down from generation to generation an arbitrarily devised verbal language which can be described as to its form and content. Form refers to the structure of the language; its grammar, syntax and vocabulary. Content refers to qualitative elements which include style and expression. The new generation derives this language principally through the auditory system, which makes it possible for one to perceive, interpret, associate, recall, and reproduce these vocal utterances. And, as mentioned earlier, an infant grasps this monumental tool spontaneously. What is equally important, however, is that, for an extended period of approximately six years, hearing is the vital sensory system through which verbal language develops. This emphasizes the fact that auditory symbols play a predominant role in the child's early orientation and adaptation to his environment.

Moreover, this suggests that the principal problem confronting the deaf child is the necessity to transpose auditory verbal symbols spoken by those around him into a set of visual verbal symbols. He is expected to use vision for perceptual and conceptual purposes many years prior to the age at which this type of functioning is demanded of the average hearing child. In addition to neurological maturation, it is significant as well that the hearing child has a wealth of verbal language experience before being confronted with the learning of a (new) visual symbol system (reading). Equally important is the fact that the average hearing six year old has had the benefit of a system of communication that is highly *redundant* and *unambiguous*. He has received exactly as they were presented to him literally millions of words, phrases and sentences. Let us refer to each accurately received, i.e., heard, phrase, or sentence as an "unambiguous straight language contact" (USLC).

In order for the average hearing child to express himself orally in fairly accurate sentences of four, five, and six words, he has experienced at least 26-30 months of USLC. Even then his sentences are not stabilized accurately. The deaf child on the other hand does not possess a means of communication which is unambiguous and redundant. If he is to develop verbal language, he must learn a set of visual symbols principally labial in nature. This is so because in our society verbal language is conveyed to infants and young children chiefly through auditory signals and symbols (speech). Since the deaf child cannot receive these through the auditory system, he must rely upon speechreading (lipreading) as a means of transposing the auditory symbol

into a visual verbal symbol. However, speechreading as a means of transposing the auditory symbol into a visual verbal symbol system is relatively inefficient, not necessarily ineffective, when compared with hearing. Information theory suggests that there is too much "noise" and insufficient redundancy. Homophenous words (those which look alike on the lips) and invisibility of certain sounds appear to be at the root of such problems. Thus the deaf youngster does not benefit from the redundancy and, of greater consequence, does not experience USLC.

Ambiguous Communication Problems

It is obvious from experience with hearing and deaf children that language development is directly related to language stimulation. The lack or diminution in reception of USLC is manifested in expression. The written compositions of deaf students and graduates of schools and classes for the deaf invariably include the so-called "deafisms." This suggests that ambiguous communication contacts contribute to long term learning and language problems. This concept of ambiguity in the reception of spoken language in essence is the basic problem confronting all deaf children.

With respect to further learning problems, it is interesting to note that, from the time of Aristotle to the middle of the sixteenth century, two imporant concepts prevailed relative to the deaf individual; the concepts of uneducability and homogeneity. No differentiation was made between the deaf and the mentally deficient. Both were considered uneducable and both were considered homogeneous groups. The first attempts to educate deaf children in the U.S. were initiated early in the nineteenth century. In this country, a distinction between the deaf and the mentally deficient came about as a consequence of the movement to establish educational programs for the deaf. The concept of homogeneity, however, has not been dispelled completely. In many instances, emphasis is placed on the expressive areas, irrespective of methods, at the expense of other developmental areas of the total individual such as social maturity, motor behavior, receptive language, emotional adjustment and visual behavior. This somewhat molecular therapeutic approach, based on the common deficiency in language and speech due to auditory sensory deprivation, tends to obscure further individual differences and enhances the concept of the deaf as an entity. Studies dealing with the manner in which deaf children utilize their basic mental capacities will be emphasized here.

Testing the Deaf

The intellectual functioning of the deaf has been demonstrated to be not significantly different from that of the hearing when the verbal aspects are controlled (2) that is, on such tests as the Performance Scale of the WISC, the Arthur Point Scale of Performance Tests (Forms 1 and 2), the Chicago Non-Verbal, the Nebraska Test of Learning Aptitude, the Drever-Collins Performance Scale and others. However, studies pertaining to the aspects of mental functioning variously termed as abstract intelligence suggest that the deaf function less efficiently than the hearing. During the latter 1920's, Drever (3) in England and Frohn (4) and Hoffler (5) in Germany and later Brunschwig (6) in the U.S. noted:

> ". . . the tendency of the deaf to prefer thinking on the level of the specific and concrete, and to refrain from forming generalizations to a far degree greater than hearing of the same age." (p. 25)

More recently, Ewing and Stanton (7) in England, Templin (8) in the U.S., and Oleron (9) in France have reached similar conclusions. Oleron concluded:

> ". . . that the deaf show an inferiority in the sphere of abstract thought . . . due to the close connection normally existing between language and abstract thought." (p. 191)

Oleron (9), Ewing and Stanton (7) utilized the Progressive Matrices Tests in their studies. Templin (8) investigated the reasoning in day school and residential school children with defective hearing. The basic questions she attempted to answer were to what extent deafness and/or institutionalization affect abstract reasoning in these children. The samples were tested with the Deutsche Questions of Physical Causality, the Long and Welch Tests of Causal Reasoning, the Brody Non-Verbal-Abstract Reasoning Test, and the Pintner Non-Language-Mental Test. Templin (8) concluded that:

> ". . . the hypothesis that restriction of the environment will result in lower scores in the reasoning test is largely supported for the in-

trinsic factor of hearing loss and largely rejected for the extrinsic factor of residence in an institution." (p. 131)

The Effects of Deafness

In addition to suggesting the hearing impaired are deficient in abstract reasoning, this finding illustrates the pervasiveness of deafness. In other words, the effects of deafness are much more basic to the organism than the factor of school placement. It is clear from such studies that the deaf youngster can be shown to be quantitatively average intellectually. It is also evident from such studies that the deaf children are handicapped in:

> ". . . the use of their intelligence, i.e., the qualitative aspects of their perceptual and conceptual functioning, and their reasoning does seem to be different. More research evidence would be helpful in clarifying the nature of the intellectual capacity of children who have sustained deafness in early life. Currently, it can be stated that it is difficult for him to live up to the potentials of his intellectual capacity. It is difficult for him to use his intelligence in as broad and in as subtle and abstract a manner as the hearing child." (10)

The term "abstract" has been used not only in reference to the deaf but also in connection with other clinical groups such as brain-injured children and adults. Underlying these diverse uses of the term "abstract" one finds a common factor, manipulation of concepts. The reciprocal relationships of an intact central nervous system and hearing are also emphasized. That organisms modify their total behavior on the basis of a specific deficiency is also apparent. The abstract behavior in the deaf organism seems different from the abstract attitude of the organism with central nervous system involvement as delineated by Goldstein (11) and Strauss and Lehtinen. (12) This in part is suggested by the work of Heider and Heider, (13) who studied the sorting behavior of deaf children and concluded that:

> ". . . deaf children make selections which resemble those of less mature hearing children rather than those of aphasics." (p. 17)

The limitation in abstract thinking of the deaf arises from and manifests itself in a different manner from that found in the brain-injured organism. Due to the realignment of the remaining perceptual systems brought about by serious auditory deprivation, qualitatively different concepts must necessarily follow. This qualitative difference was also suspected by Heider and Heider, (13) who, after completing an extensive quantitative analysis of the sentence structure of the deaf and hearing, suggested that:

> ". . . it seems more likely that the difference between the deaf and the hearing cannot be fully expressed in quantitative terms as the degree of retardation, and that they represent differences not merely of skill in the use of language forms but in the whole thought structure." (p. 99)

In conclusion, the awareness on the part of the educator to this problem in abstraction is evident in the literature pertaining to the deaf (12). From the educator's point of view, the term "abstract" is something used to describe verbal symbols (i.e., words) which have no absolute correlate in the physical world. For example, truth, religion, freedom, etc., are considered abstract concepts. Conveying the meanings of abstract concepts and subtleties of language to the deaf is one of the most challenging problems facing those engaged in the education of the deaf. It seems that a more efficacious means is needed for providing hearing impaired youngsters and infants with unambiguous straight language contacts. Such systems or means would be expected to reduce to a great extent difficulties in adjustment and learning resulting from and/or associated with underachievement in verbal symbolic language development.

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QUILL, LEONORA C. ***Areas of Instruction for Teachers of Children Who Are Deaf*** **(Oral Day School). Forward by Margaret Fitzgerald. 104 p. Compiled 1959. Spiral Binding: Paperbound. Published by Champaign Community Schools, 104 North Lynn Street, Champaign, Illinois. $2.**

General aims and developmental steps in teaching communication skills are discussed and outlined for the guidance of trained classroom teachers of deaf children. Five developmental levels, ranging from pre-primary through high school, are covered in each of four sections, which are devoted to reading, language, speech, and auditory training. New contributions include a special vowel chart, based on modified Alcorn Symbols, and separate auditory training outlines for use with children in three general hearing acuity catagories. The Fitzgerald Key is recommended as a basis for language development. A significant feature is that the communication areas are interrelated in the basic plan of the book. Important references pertaining to the education of deaf children, as well as some literature from the field of general education, are listed at the end of each section, and are assembled in a cumulative bibliography which also contains a few sources of information for parents. These materials should be consulted in order to apply suggested instructional techniques. Mrs. Quill is a teacher with many years of experience in the education of children with impaired hearing. She has written a practical, carefully-organized source book which should prove helpful to educators of deaf children.—**F.I.P.**

FARBER, BERNARD. ***Effects of a Severely Mentally Retarded Child on Family Integration.*** **Monographs of the Society for Research in Child Development. Vol. 24, No. 2, Serial No. 71. 1959. 112 p. Child Development Publications, Purdue University, Lafayette, Indiana. $3.**

There are relatively few studies dealing with the effects of severe mental retardation on parents. Perhaps even fewer studies deal specifically with these effects upon family integration — including sibling tension. Since the traumatic effects of children with severe mental retardation upon parents is a practical problem for psychologists, psychiatrists, social workers, and other professional personnel, this area has become a fruitful one for research in the understanding of the family.

With an impressive array of independent variables including sex of the retarded child, social status, a modified Vineland scale, age of the retarded child, the retarded child at home or in an institution, religious preference, frequency of church attendance, frequency of seeing wife's or husband's mother, neighborliness scale, frequency of seeing friends, and parents' activity in formal organizations, Dr. Farber tested 24 separate hypotheses on the effects of such variables upon marital integration and sibling role tension. The Mann-Whitney U test was used in the statistical analyses.

In general, the sampling of 240 families with a total of 665 children for this investigation formed this composite picture: native born Caucasians married approximately 15 years, in their first marriage, about 40 years of age, in white-collar occupations with a median income close to $6000 per year. The parents completed at least a high school education and had, on the average, three children ranging in age from 6 and 11, one of these children recognized as severely mentally retarded. The study, being restricted to couples married at the time of the investigation, no doubt eliminated families whose integration was most likely affected by the presence of a severely retarded child. Therefore, the results of the study, in all probability, underestimated the disintegrating effects of severe mental retardation upon families.

A two-phase interview technique was employed which allowed for independent husband and wife responses to oral and written sections. Results were analyzed in three chapters: the child at home, home versus institutional environment, and community relations. The following conclusions summarize the findings of major significance resulting from the study of the 240 families.

Marital integration of parents with their retarded *boy* at home was lower than that of parents of retarded females. Lower-class families were demonstrated to have suffered even more acutely from the presence of a retarded male child. Sex-based parental expectations (careers) apparently vary in accordance with socio-economic class. Disruptive effects upon family integration were magnified as the retarded male grew older in the home setting.

Institutionalization tended to neutralize the differential effects of the sex of the retarded child on the marital relationships of parents. In general, however, the institutionalization of the retarded male had a beneficial effect upon marital integration.

The effects of severe mental retardation in the family produced differential adjustment problems for the normal siblings. The sex of the retardate did not markedly influence the nature of the adjustment process for the normal sibling, but the greater the degree of dependence of the retardate the more adverse the effects upon sibling adjustment. In general, the normal sister was more adversely affected when the retardate resided in the home—the normal brother, when the retardate was institutionalized.

Regarding non-familial factors, results demonstrated that frequent interaction with the wife's mother was related to high marital integration; while frequent interaction with the husband's mother, active participation with friends and relatives, and/or husband's activity in formal organizations apparently contributed to low marital integration.

Dr. Farber's monograph does not pretend to predict the ultimate effect of severe mental retardation on family relations precisely. Yet, the results presented may offer clearcut guide lines for the professional consultant dealing with familial problems which may arise with the presence of a severely mentally retarded child. On the basis of this investigation, for instance, there is little doubt but that a retarded boy, particularly after the age of nine years, will have a disruptive effect upon marital relationships.

Some findings presented in the monograph remain open to question. Previous research on handicapping conditions does not support the general contention that mother-directed attention toward the handicapped child automatically presumes more permissiveness in maternal relationships toward normal siblings. However, the conclusions drawn from this investigation give more information regarding the impact of severe mental retardation upon family structure than any other previous study of this type. Although the nature of the evaluative instruments may offer some bias to the results of the study, the directions for further investigation are now well defined. Further generalizations await future research following the sociological theory and outline presented with more refined instrumentation.—**R.J.C.**

CRUICKSHANK, WILLIAM M. and TRIPPE, MATTHEW J. *Services to Blind Children in New York State.* Syracuse University Special Education and Rehabilitation Monograph Series No. 4. 1959. 495 p. Syracuse U. Press, Syracuse 10, N. Y. $5.

This book reports on a comprehensive descriptive study of services to blind children throughout the state of New York.

(Continued on next page)

More than 20 workers participated in the two-year study which contacted 7000 schools and agencies to identify 2773 blind children and youth under 21 years of age.

The data are presented in 11 chapters, four appendices, 17 figures, and 200 tables, in a style and format unusually good for such reports.

The questionnaire study was supplemented by direct visits and a legislative analysis, both notable additions to this type of study.

The study revealed that despite its extensive services one-eighth of the total number of blind children in the state were unknown to the N. Y. State Commission for the Blind when the study was begun. This finding is significant for all states, especially in view of the compulsory reporting law in New York. Overlap in services and lag in providing them promptly are revealed by the study.

Though the study deals primarily with personnel, equipment, and descriptive characteristics of the children served, it is recognized that "The primary problems of blind children . . . are instructional, not personnel." The educator of exceptional children will be disappointed in not finding in the study data pertaining to evaluation of instruction and the attainment of the goals of education for children.

The investigators wisely call attention to the serious limitations in the data made available to them which purport to be descriptive of vision status, intelligence, hearing, speech, multi-handicapping conditions, and adjustment problems. These data were often obtained by persons of unknown professional status or based on subjective judgments of unknown validity. To draw inferences about the universe of blind children from these inadequate data on a sample of such children could lead to erroneous conclusions.

This extensive study has the very positive value of providing an examination of New York State services, and as such, will be of use to interested persons in the state.—**S.C.A.**

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A DIVISION ON TEACHER EDUCATION report:

ADVANCED GRADUATE TRAINING in special education

JAMES J. GALLAGHER

AT THE 1957 CEC convention in Pittsburgh, Pa., two important papers were presented by Kirk[1] and Kvaraceus[2] which brought into focus problems of advanced graduate training in special education. The Division on Teacher Education established a committee to study this problem, and James Gallagher was appointed chairman. This committee was directed to attack important questions such as:

What standards might be proposed for universities interested in developing advanced graduate training in special education?

Should there be differential training programs established to prepare students for positions in specific job areas of special education such as teacher training, administration, and research?

What kind of admission standards are necessary?

What should be the background, training and experience of the staff members in such a program?

In order to answer these and other important questions, the committee chairman asked the following directors of doctoral programs in special education to serve as committee members:

William M. Cruickshank, Syracuse University
Lloyd M. Dunn, George Peabody College for Teachers
Maurice H. Fouracre, Columbia University
Samuel A. Kirk, University of Illinois
William C. Kvaraceus, Boston University
John J. Lee, Wayne State University
Margaret Neuber, Pennsylvania State University

The following procedure was adopted to obtain the information given in this report:

A. Each of the committee members was asked to write freely on topics which they considered to be the pertinent issues in advanced graduate training in special education.

B. Information extracted from these documents was placed on a rating scale by the chairman.

C. The rating scale was then submitted to the membership of the committee who were requested to state where they stood on the various issues.

These ratings were transformed by the chairman into a preliminary report. The committee met at the 1958 CEC convention and made certain revisions and additions to the report. The final report was given orally at the 1959 CEC convention in Atlantic City, and was accepted by the Division on Teacher Education.

This article represents the final summary of the committee's work. The minimum standards reported in this article were taken to be that point on the scale that at least six of the seven respondents declared was the minimum acceptable to them. Naturally, the desirable program includes even higher standards than reported here.

Definition. What is meant by a doctorate in special education? To a large extent, the committee's answer to this question is documented by the recommended minimum standards of admission, staff, and curriculum. The members of the committee felt that a differentiation should be made between a doctorate in *special education* and a doctorate in an area which might be included in the more general field of special education, such as

[1] Kirk, Samuel A. "A doctor's degree program in special education." *Exceptional Children*, 1957, 24, p. 50-52, 55.

[2] Kvaraceus, W. C. "Research in special education: Its status and function." *Exceptional Children*, 1958, 24, p. 249-54, 280.

• James J. Gallagher is an associate professor, Institute for Research on Exceptional Children, University of Illinois, Urbana.

audiology, gifted children, speech correction, and the like.

The committee felt that there are educational principles and procedures which can be applied to the entire educational program for exceptional children. Such information may be related to the characteristics of the children (learning difficulties, personality development) or the educational provisions made for them (classroom organization, curriculum development).

A doctorate in a specific area such as speech correction would seem to imply less emphasis on general principles applicable to all exceptional children, and a greater emphasis on the problems and principles related to one specific type of child. The suggested program content discussed later in this report shows how the committee conceptualized this difference into program suggestions.

1. Admission Requirements

The character and purpose of a training program is reflected in the admission requirements for candidates to such a program. The standards here reflect the amount and kind of training and experience expected of the candidates prior to their entrance into the program. Table 1 is a summary of the *minimum* admission requirements for doctoral candidates in special education as indicated by the directors' ratings. Note that the minimum admission requirements are identical for candidates in the areas of administration and teacher training. The committee members felt that the background of a candidate in either of these training programs could be the same. Any necessary differentiation would occur *during* the training program. However, there were specific differences in admission requirements for the research specialist. Higher academic standards are required but wider latitude is allowed in types of previous experiences that would be accepted.

The minimum *academic experience* of the candidates is a degree in some field of education. Most of the directors felt that some combination such as a bachelor's degree in education and a master's degree in some field of special education, or the reverse of this combination, would be especially desirable. For the research field, the standards are relaxed. A degree in the social sciences would be sufficient along with school experience which could be added during the training program.

The members felt strongly that some considerable amount of *Field Experience* would be necessary. The minimum standard that the committee members were willing to accept was two or more years of teaching experience in one or more fields of special education. Thus, a person who was a teacher of any type of exceptional children for two years or more would meet the minimum standard of field experience. The members relent only in this respect: an internship taken during the graduate training program could be used to fulfill partially this requirement.

For the research specialist, field experience within the school system was considered important, but direct experience in the classroom was not absolutely necessary. Thus, a position of an itinerant specialist such as a school psychologist or speech correctionist for a year or more would represent acceptable experience.

The committee members expected the research specialist to have a somewhat higher minimum grade average than either the specialist in administration or teacher training. This seems to be a recognition of the more abstract and conceptual

Table 1. Minimum Admission Requirements for Doctoral Candidates in Special Education

Admission Requirements	Administration	Teacher Training	Research
Academic Experience:	BS or MS in some field of education		BS or MS in the Social Sciences
Field Experience:	Teaching experience in one or more fields of exceptional children for two years (internship may partially fulfill this requirement)		Experience in related area (school psychologist, speech correctionist, etc.)
Academic Record:	Grade Average of B with B+ average in special education courses		Grade average of B+ overall
Intellectual Aptitude:	Score in the top 50% on Miller Analogies Test or its equivalent.		
Other:	Favorable letters of recommendation and personal interviews to determine motivation and social-emotional maturity are necessary.		

Table 2. MINIMUM REQUIREMENTS FOR PROGRAM STRUCTURE FOR A DOCTORATE IN SPECIAL EDUCATION

STRUCTURE	ADMINISTRATION	TEACHER TRAINING	RESEARCH
NUMBER OF STAFF	The equivalent of two full-time staff members		
STAFF QUALIFICATIONS	A doctorate in some related field plus evidence of scholarship in the area of special education		
RESIDENT REQUIREMENTS	**Three semesters full-time residence two of which are consecutive**	**Two semesters full-time residence**	**Three semesters full-time residence, two of which are consecutive**
LENGTH OF PROGRAM	Four semesters after Master's degree		
DISSERTATION	1. ***Experimental research study*** 2. ***Descriptive study of problem area in exceptional children*** 3. ***Study of historical and philosophical trends in the area of special education***	..	***Experimental research study testing hypotheses derived from educational or psychological theories***

nature of this curriculum. However, most of the committee were not impressed with the importance of past grades. Many made the comment that the meaning of grades is so variable from one institution to another than one can place little or no confidence in the past grade record of many students. Greater weight is placed upon the other factors mentioned here.

One of these factors is intellectual aptitude. So long as an acceptable minimum of grades was reached, the committee seemed inclined to place more weight upon learning aptitude at the graduate level. The minimum requirements were that the student should fall within the top 50 percent of graduate students in education on the Miller Analogies Test or some similar test of graduate aptitude. This was a minimum; actually many of the members felt that the requirement might be higher.

They stressed the importance of favorable letters of recommendation and personal interviews wherein the motivation and social-emotional maturity of the candidate could be assessed. This suggests that there are certain areas not covered by the official records and tests and they have found it necessary to use the personal interview and letters of recommendation to supplement the standard information.

In summary, it would be said that a candidate for the Administration and Teacher Training Programs should have had some academic work in the field of special education, two years of teaching experience in one field of exceptional children, a reasonable academic record, above average intellectual aptitude for graduate work, favorable recommendations, and present a favorable impression in a personal interview.

Many of the members felt that the candidate for the research program could come from a background other than that of special education. While he should have had experience with the school situation, this experience needn't be in the classroom. High intellectual aptitude and superior academic record is expected from these candidates in addition to the standard personal qualifications demanded by the members.

2. Program Structure

In this section the committee members expressed their viewpoint on general program structure rather than on the specific skills to be learned in the program. There is general agreement among the members that the requirements do not vary for the three areas: administration, teacher training, and research. The only noticeable difference lies in the character of the dissertation. Table 2 summarizes the opinions of the members on this subject.

The minimum university staff considered acceptable would be the equivalent of two full-time staff members in the department for special education. It was the strong view of the committee that one-man departments cannot provide the variety and depth of training that could justify a doctoral training program. Indeed, many of the directors had some doubts about these minimum requirements and would much prefer a heavier concentration of staff.

The committee also had strong opinions as to the qualifications of such staff members. One obviously desirable characteristic would be that the staff member would have a doctorate in the field of special education itself. However, the committee recognized the newness of the field and thus ac-

Table 3. MINIMUM REQUIREMENTS FOR DOCTORAL STUDENTS IN SPECIAL EDUCATION

SKILL AREA	ADMINISTRATION	TEACHER TRAINING	RESEARCH
SPECIAL EDUCATION	Knowledge of personality, social and academic characteristics of exceptional children.		
	Two or three courses discussing the special problems of certain areas of exceptional children (mental retardation, gifted, deaf, speech handicapped etc.)		
	Knowledge of administrative and curriculum adjustments of exceptional children		D*
EDUCATIONAL PSYCHOLOGY	Knowledge of the normal child and his development		
	Ability to relate psychological theory to educational problems		
	D	D	Ability to relate sociological theory to educ. problems
CURRICULUM DEVELOPMENT	Understanding of the general principles of curriculum development		D
	Understanding of curriculum problems in special subject areas (reading, arithmetic, etc.)		D
	Ability to design a curriculum for one or more types of exceptional children		D
STATISTICS AND RESEARCH DESIGN	Ability to understand common measures of central tendency variation		
	Ability to understand methods for comparing groups.		
	Ability to read and interpret research in areas of special education.		
			Knowledge of special methods of analysis. (factor analysis nonparametric stat., etc.)
		D	Ability to design and carry out research
ADMINISTRATION	Knowledge of skills in supervision of elementary or secondary schools		D
	Understanding of theory and practice of American Educational administration	D	
	Legal basis of school administration	D	
	School finance and business management		

*D—Desirable, but not necessary.

cepted, as a minimum qualification, a doctorate in a related field such as educational psychology, elementary education, clinical psychology, etc. This "related" doctorate is accepted with the provision that the individual has shown definite evidence of scholarship in the area of special education itself. Such a requirement is considered valid for the research area since supervision of doctoral dissertations in this area should be done by persons with a knowledge of the field itself, in addition to general research competence.

The minimum suggested residence requirements are two semesters of full-time residence for doctoral candidates in Teacher Training and three semesters full-time residence for persons enrolled in Administration and Research. At this point the committee appeared to take a strong stand in favor of having the student in a position where he can learn informally, as well as formally, from the university staff. They rejected the alternate notion that a person can receive a doctoral degree by merely attending formal classes in the evening or on weekends.

The minimum length of the program is four semesters after the master's degree. Few members of the committee had confidence that many students would be able to finish in that period of time. The reason for the length of the program may be seen in Table 3 where the needed skills of these specialists are outlined.

The persons in the Administration and Teacher Training curriculums are seen to have a much wider latitude in the character of the dissertation than does the Research field. The person training for Research is expected to do an experimental study, while in either of the other curriculums the student can do an experimental research study, a descriptive study of a problem area in exceptional children, or a study of historical and philosophical trends in the area of special education.

3. Skill Requirements

Table 3 indicates the minimum skill requirements that the members have agreed upon for doctoral students in the three general areas of special education. It is not suggested that all of these skills are to be demanded of the student during the program. Nor does it mean that these skills must be learned through *course work*. A number of directors commented favorably on the notion that required course work be kept as light as possible to allow maximum flexibility in planning an individualized program for the student. Hopefully the student will already have many of these skills upon his entrance into the doctoral program (see admission standards). If he does not possess these skills upon entrance, his program would need to be lengthened considerably in order to compensate for these deficiencies.

The previous two tables dealing with admissions standards and program structure have shown the similarity of the requirements for students in the Administration or Teacher Training curriculums. It is only in the skill requirements that small differences are identifiable. There is a continuing evidence in Table 3 that the skill requirements for the Research person are considerably different from the other two areas. The large capital D in the table represents the opinion of the committee that such skill would be a desirable skill for the person in this field to have, but would not be absolutely necessary.

In the area of *Special Education* it is clear the committee members felt that all of the doctoral candidates should possess a knowledge of the various characteristics of exceptional children together with an extensive knowledge of the special problems presented by the various types of exceptional children. They were hopeful that the person would have extensive knowledge of at least *two* special areas of exceptional children and general knowledge of the other areas. The committee also felt that a knowledge of administrative and curriculum adjustments was an essential part of the skills of a person going into Teacher Training and Administration. Although this would be desirable also for the Research person, it was not considered absolutely necessary.

In the general area of *Educational Psychology* the committee would want all of the candidates to understand the development of the normal child and possess the ability to relate psychological theory to educational problems. The Research person was seen as having a larger stake in knowledge of conceptual frameworks and their application to education, whereas this would be merely a desirable characteristic for the Administration or Teacher Training curriculum.

The committee members felt that three general areas of *Curriculum Development* should be known to the Administration and Teacher Training doctoral student. These requirements would involve:

1. General knowledge of curriculum development.
2. Knowledge of special curriculum problems in certain subject fields (reading, science, etc.).
3. The ability to design a curriculum in the area of exceptional children which represented their own special field of competence.

Despite the fact that Administration and Teacher Training students were not expected to be involved directly in research activity, the committee felt that they should understand the basic tools of *Statistics and Research Design* and be able to read and interpret research in special education. It was felt that if these persons would be instructing other students, the ability to evaluate the research in their own field was a crucial competency. The Research person, in addition, was expected to have knowledge of the more involved methods of analysis and to be able to design and carry out research.

Under the general heading of *Administrative Skills* the committee felt that the person in Teacher Training should have knowledge of the supervisory techniques in either elementary or secondary schools and that the student in Administration should have knowledge of school finance and business management, the legal basis of school administration, and an understanding of the theory and practice of the American educational system.

An interesting note concerning the area of counseling was the feeling that students in Administration and Teacher Training should have the ability to counsel exceptional children and their parents. This has been a long-neglected area of skills and training and perhaps represents a desire on the part of the committee to insert a new dimension into the training program.

Two other skills which the members felt should

be held in common by the students in Teacher Training and Research were knowledge of theories of learning, personality development, and the family and how it functions. These were considered desirable but not necessary for Administration.

The amount of required practical experience can be modified by the type of experience the person has had prior to entering the program but generally would consist of a period of one year supervised practice in the area of their job specialty. For the Research student this could mean a graduate assistantship on a research project while in graduate school rather than a placement in a community school setting. For the Teacher Training student a variety of placements might be acceptable; in Administration, internship probably would mean job placement in a school system or state department of special education.

Discussion

Since professional standards are established usually to eliminate certain obvious incompetencies from a field of endeavor, it might be useful to consider who might be eliminated through the suggested standards outlined above.

The minimum admission requirements stress the importance of experience. The intellectually and academically qualified student who did not possess this necessary experience might not be ruled out of the program, but would have to obtain appropriate experience before completing the program.

The socially and emotionally maladjusted person would hopefully be eliminated through personal interviews. In positions where the demand to cooperate with other persons is paramount, serious personal problems would be an important debilitating factor. The *research person* is, by tradition, more nonconforming and perhaps less interested in "fitting in" with the group. In the educational setting, however, most of the research would necessarily demand the cooperation of school authorities outside his own specialty and a modicum of social skill and personal adjustment would be required.

The opinions of the committee regarding program structure has many implications. They reject the idea that a person can call himself a specialist in special education because he did a doctoral study which involved some type of exceptional children. This is particularly true if his training took place at a university where none of the staff members are qualified in the field of special education. While related fields such as elementary education, educational psychology and school psychology provide invaluable adjunctive experience and training, they are *not* a substitute for competent staff in special education.

Under necessary skills, the committee has addressed itself to the question of whether a person intensively trained in one field of special education but with a minimum background in the other areas should qualify for a doctorate in special education, and its answer is in the negative. The outlined skills present a clear requirement for a broad knowledge of a number of types of exceptional children. Although the suggested standards are less strict concerning the Research student, some school experience is a necessary condition. This indicates that they would expect such a person to be concerned with applied research, although the implications of such research might well have important basic theoretical implications.

By implication, the committee has suggested that the doctoral training program for Administration and Teacher Training are very similar and differ mainly in the character of the practicum experience obtained. The Research student has a different training program and the tendency toward flexible requirements suggests that individual programs may have to be designed for persons interested in this field.

In closing, it should be re-emphasized that these minimum requirements are merely *suggested* standards and are not meant to define possible punitive or legislative limits. Their purpose is to bring together the pooled experience of persons most concerned with the development of these programs, so that others interested in program development might have the benefit of their combined thinking.

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Editorial

WHEN the parents of an exceptional child enrolled their child in school, they were told, "According to the reports, we have good reason to believe that Billie will fit nicely in our special education program over in Lincoln School. At least, we should like to give him a try at it." What this statement really meant was, "We have a *special teacher*. She'll do her best."

The psychologist's report included this statement: "Billie's level of intellectual functioning is at least two years below his chronological age, with greatest deficits in the areas of vocabularly, rote memory, and abstract reasoning. His school program will need considerable adjustment." What this part of the report really means is, "*The special teacher* will need to use appropriate methods for teaching this boy."

In a faculty meeting at Lincoln School, the elementary principal said, "We have a fine special education program here in our school, and we want it to be an integral part of our total program of education services." What he really meant is, "It is the job of the *special teacher* to see that her program is accepted."

And so it goes. Special education eventually comes down to the availability of the special teacher and her success in guiding the growth and development of children with unique learning problems. Without her, the parent would be told the school had no program for their child, the psychologist's findings would not be fully implemented, and the principal would have a different item for his faculty meeting agenda: the need for special education programs at Lincoln School.

For those children whose needs cannot be met in a regular classroom, is not the special teacher hailed, on one hand, as their one real hope? Yet, is she not often considered as "just a teacher?" In either a meager or comprehensive program of coordinated services for the exceptional child, is she not the one who is under the greatest pressure to produce results—results that others have prescribed and for which her every move is watched?

She would be the first to recognize the invaluable help given her by those who specialize in working with parents, or in making psychological evaluations, or in conducting research. Yet she must wonder, sometimes, just what is expected of her. Is she called upon to be an aggressive educational leader, or is she expected simply to check her mail box for instructions on how, when, and what to teach?

Much is written and said these days about doing more for teachers. This is good. But unless increased support for her indispensible role brings moderation in and clarification of the part she is expected to play, she very well may be regarded as a champion by default, or a simple pawn in the educational scheme of things.—*J. McC.*